Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

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In the Matter of)	
)	
Protecting Against National Security)	WC Docket No. 18-89
Threats to the Communications Supply)	
Chain Through FCC Programs)	
)	

COMMENTS OF COMPETITIVE CARRIERS ASSOCIATION

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COMMENTS OF COMPETITIVE CARRIERS ASSOCIATION

I. Introduction and Executive Summary.

Competitive Carriers Association ("CCA")¹ submits these comments on the rule proposed by the Federal Communications Commission ("Commission" or "FCC") to prohibit the use of money distributed from the Universal Service Fund ("USF") "to purchase or obtain any equipment or services produced or provided by any company posing a national security threat to the integrity of communications networks or the communications supply chain." The proposed rule is seriously flawed: it will not serve its intended purpose, is both over- and under-inclusive, will gravely impair the ability of wireless providers to serve the needs of low-income, rural, and unserved and underserved communities, and contains constitutional deficiencies.

CCA has taken a leading role in supporting cybersecurity and network security initiatives

¹ CCA is the nation's leading association for competitive wireless providers and stakeholders across the United States, including many recipients of critical USF support. CCA's membership includes nearly 100 competitive wireless providers ranging from small, rural carriers serving fewer than 5,000 customers, to regional and national providers serving millions of customers. CCA also represents approximately 200 associate members including vendors and suppliers that provide products and services throughout the mobile communications supply chain.

² Protecting Against National Security Threats to the Communications Supply Chain Through FCC Programs, Notice of Proposed Rulemaking, FCC 18-42, WC Docket No. 18-89, Appendix A (rel. Apr. 18, 2018) ("NPRM").

in light of the pressing need to secure the United States' telecommunications networks against hostile foreign actors. For example, CCA is an industry partner and a participating member of the National Coordinating Center for Communications ("NCC") which is part of the Department of Homeland Security ("DHS"). The NCC monitors threats and coordinates action to protect America's telecommunications infrastructure. Along with other industry and federal partners, CCA assists in "the exchange of vulnerability, threat, intrusion, and anomaly information."³

CCA cannot, however, support the proposed rule because it will potentially devastate the ability of carriers receiving USF support to continue to provide service to millions of Americans in rural and other high-cost areas, as explained in the attached declarations. Many carriers have built and now maintain their networks with equipment and services provided by companies targeted by the proposed rule. Much of that investment has been made recently to bring networks from 2G and 3G to 4G and to prepare for the transition to 5G. These carriers simply cannot afford the hundreds of millions of dollars necessary to replace and rebuild their networks using only equipment and services from a new list of approved providers. Some carriers will go out of business as a result; others will struggle to survive. The many Americans who depend on these carriers, mostly in rural and remote areas, will either be forced to help subsidize the massive costs of rebuilding—or will lose their access to telecommunications services entirely.

The proposed rule purports to apply only "prospectively." In truth, it will immediately cause devastating retroactive effects. Many carriers cannot operate networks with an inefficient mix of equipment from various networks, or by depending on one vendor to maintain and upgrade equipment supplied by another. The only practicable solution for most carriers is to rip-

National Coordinating Center for Communications, U.S. Dep't of Homeland Sec., https://www.dhs.gov/national-coordinating-center-communications (last updated Feb. 14, 2018).

and-replace equipment within their network. The proposed rule works retroactively: it upsets the settled expectations of carriers and destroys the economic value of their investments.

The proposed rule has already sent a chill of uncertainty throughout the market. This uncertainty deters investment, as carriers will not spend capital on projects that may instantly be rendered worthless if a single component in a long supply chain is placed on the prohibited list. Carriers do not know which foreign companies will be prohibited under the proposed rule, let alone which companies may be added to the list in future years. With such dire consequences for guessing wrongly, including investing in equipment from a company that is permitted today but may be prohibited tomorrow, planned investments will be postponed or abandoned.

Nor does the proposed rule apply equally to all carriers. Rather, it singles out for special restrictions only those carriers who receive USF support—the very carriers that can least afford to rip out and rebuild their networks. While the rule purports to aim at foreign companies whose equipment or services pose a national security threat, the actual, immediate victims will be the millions of Americans who live in rural or unserved and underserved areas and depend on carriers who in turn depend on USF support. The Commission's approach will cause irreparable and immeasurable harm.

As Congress and the Commission have recognized, USF support plays a critical role in connecting rural America to the twenty-first century economy. Consumers today enjoy telecommunications and information services far beyond anything they could have imagined not long ago. The rapid expansion of the nation's networks and the steady development of new technologies allow for faster and more consistent connectivity, giving all Americans access to commercial, educational, medical, entertainment, and other services and products that until recently were difficult to obtain in many parts of the country. Congress, in creating the USF,

deserves credit for this success story. Over its more than two decades of existence, the USF has provided critical support for telecommunications access for rural and other unserved and underserved communities. The USF also aids healthcare providers in rural America, connects students with educational opportunities, and provides subsidies for low-income Americans who might otherwise be disconnected from the modern world. The USF has thus helped the Commission fulfill its statutory mission to "make available, so far as possible, to all the people of the United States . . . a rapid, efficient, Nation-wide, and world-wide . . . communication service with adequate facilities at reasonable charges."⁴

The proposed rule threatens all of this. It will turn the universal service statute and its core principles upside down. Whereas Congress created the USF mechanism as a way to *provide* affordable network access to rural America, the proposed rule will use the USF mechanism as a way to *withdraw* that access. Congress directed the Commission to administer the USF in accordance with a list of universal service principles. None of those principles are compatible with this rulemaking.

The Commission has provided virtually no evidence supporting its proposed rule, let alone evidence that justifies the proposed rule's draconian effects. Rather, the proposed rule is largely based on a 2012 House Committee report—a very thin justification for a rule that threatens to upend an industry. The Commission does not explain why it waited six years to act if the danger is sufficiently urgent as to effectively require the shutdown of networks. Nor does the Commission explain why a report that focuses on equipment provided by certain vendors should be extended to maintenance services—or why the Commission's proposed prohibition

⁴ 47 U.S.C. § 151.

goes well beyond the narrow recommendations of the Committee report. The NPRM makes no meaningful effort to assess costs and benefits, presumably because the costs are immense while (as the Commission admits) it does not even know and cannot begin to describe how the benefits might be quantified. Indeed, the NPRM provides little evidence that the proposed rule will make America's vast telecommunications networks any safer, especially since the proposed rule targets only a sliver of those networks—those that rely upon USF funding. Securing the nation's telecommunications networks is vitally important. But vague incantations or appeals to national security cannot override the limits of agency authority, the need for reasoned decision-making, and the requirement that an agency support its conclusions with record evidence.

Other federal agencies are better positioned to make judgments as to how best protect the supply chain from national security threats. The Commission should stay its hand and allow DHS and/or the Department of Commerce ("DoC") to make these expert judgments rather than to thrust itself imprudently into this area. It is ill-advised for the Commission to attempt to make complex national security and foreign policy determinations—areas that are outside the Commission's area of expertise—under the artificial cloak of a USF-eligibility regulation. There must be a rational process to approach national security threats to properly combat them.

At a minimum, the Commission should consider a rule that narrows the scope to limit the harm to carriers and rural Americans and provide a meaningful and robust waiver process. It should not require full compliance for ten years from the rule's adoption to allow carriers sufficient time to reconfigure their networks and spread out costs. And it should establish a compensation fund to mitigate the taking of the carriers' private property and the destruction of their reasonable investment-backed expectations.

II. The Proposed Rule Will Harm CCA's Members and Millions of Rural Americans.

A. The Proposed Rule Will Drive Up Costs by Shrinking the Market and Creating Uncertainty.

Carriers serving rural Americans face difficult challenges. Equipment is more expensive because supply is limited and transportation costs are greater. Smaller carriers struggle to obtain the newest handsets. Services often can be more expensive for similar reasons. Sources of capital are limited. There are currently only two specialty lenders, CoBank and Rural Telephone Financial Cooperative, that possess the understanding of the rural wireless industry needed to properly evaluate the merits of any project financing proposal. For all these reasons, rural areas inherently present higher costs of doing business.

The proposed rule will fundamentally alter the marketplace to the detriment of rural carriers and their customers, as discussed in the individual declarations attached to these comments.⁵ The proposed rule threatens to drastically alter the supplier market for core network equipment. The number of suppliers of services also will be cut significantly. The relative cost of both replacement and next-generation equipment will rise as a result of the proposed rule, as will the cost of borrowing. Lower-cost providers will be pushed out of the market, which will reduce overall supply and increase demand for the higher-cost providers. Elimination of lower-cost competitors will increase wholesale costs from other manufacturers for both network infrastructure equipment and devices by removing a key constraint on pricing.

Decl. of Steven K. Berry (June 1, 2018); Decl. of Michael Beehn (June 1, 2018); Decl. of Frank DiRico (June 1, 2018); Decl. of James Groft (May 29, 2018); Decl. of Todd Houseman (June 1, 2018); Decl of Michael D. Kilgore (June 1, 2018); Decl. of John C. Nettles (June 1, 2018); Decl. of Eric J. Woody (June 1, 2018).

The proposed rule will introduce (in fact, already has introduced) substantial uncertainty into the markets for network equipment, devices, and services because carriers cannot predict whether companies that are approved today might be deemed suspect tomorrow, or whether the market can withstand the elimination of a substantial portion of suppliers. Uncertainty leads to higher upfront and ongoing costs, as well as lost revenue from foregone investments. Instead, the FCC must attempt to develop demonstrable improvements in its national security, rather than propose detrimental regulatory burdens on carriers with no clear benefit. Chairman Pai has expressed grave concern over just this type of problem in the context of the 2016 budget control mechanism.⁶ Higher costs caused by the proposed rule will combine with cuts in USF support overall.⁷ And, of course, higher costs likely mean higher rates for consumers. Moreover, customer churn or loss rate will increase, which pushes the direct-to-consumer harms back onto the carriers, creating a dangerous cycle.

B. The Proposed Rule Will Reduce Coverage and Degrade Customer Support.

Of vital importance to carriers is the quality and timeliness of the services provided by equipment vendors, many of whom operate under long-term or opt-in extension contracts. Rural carriers serve fewer customers, who are spread across a wider geographic area. The market

⁶ See Press Release, Federal Communications Commission, Statement of Chairman Ajit Pai on Projected USF Budget Cuts for Small, Rural Carriers (May 1, 2018).

See Connect America Fund; A National Broadband Plan for Our Future; Establishing Just and Reasonable Rates for Local Exchange Carriers; High-Cost Universal Service Support; Developing an Unified Intercarrier Compensation Regime; Federal-State Joint Board on Universal Service; Lifeline and Link-Up; Universal Service Reform – Mobility Fund, WC Docket No. 10-90, GN Docket No. 09-51, WC Docket No. 07-135, WC Docket No. 05-337, CC Docket No. 01-92, CC Docket No. 96-45, WC Docket No. 03-109, WT Docket No. 10-208, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17672, ¶ 18 (2011) (USF/ICC Transformation Order) (announcing budget cap mechanism for high-cost USF program).

reality is that companies providing services such as repairs and equipment installations prioritize larger carriers with more urban and suburban footprints. For example, in 2017, one CCA member experienced a network outage that lasted more than 24 hours because the carrier could not get the vendor to service the carrier's equipment. The experience of many rural carriers has been that newer foreign entrants to the market for these services are more attentive to rural carriers than other service-providers and perform repairs and installations more quickly and reliably. The quality and timeliness of these services increase coverage reliability for consumers, including subscribers to larger carriers who use rural networks while roaming. That reliability, in turn, supports expansion of the Internet- and app-based economy into rural areas and enhances public safety by ensuring access to emergency services.

Support for consumer devices also is critical. Devices and the operating systems ("OS") and applications that populate them require software updates on a regular basis. OS and application updates are developed, tested, and deployed in multistep processes that rely on several entities located around the world. An OS provider in the United States, for example, may identify an issue that necessitates an update, which has to be developed and made available to manufacturers who customize the OS for their devices. Those updates often are tested by the network operator and may be sent back for further development by the manufacturer or the OS developer. These functions may be supported by companies that may at some time in the process be on the prohibited list. If an application is unable to download and install updates, the application eventually will not work. The same is true of the phones and tablets themselves. Without critical software updates, a device eventually becomes unusable. And even before that point is reached, the device becomes vulnerable to malicious malware and hacking attempts because it lacks the most recent security software updates. Because many CCA members receive

USF support to upgrade and maintain their networks, it is possible that consumer devices will be unable to access the software updates that these devices require.

C. Carriers Will Be Forced to Rip-and-Replace, Because Mix-and-Match Is Not a Realistic Solution.

The proposed rule will result in many carriers having to rip out and replace all equipment bought from companies that are on or become placed upon the list of banned entities, because that equipment will become unusable in a short period of time without upgrades and services. Carriers could try to use new service providers to work on old equipment and install upgrades manufactured by different companies. But there is great uncertainty as to whether existing network equipment purchased from now-disapproved manufacturers can interoperate or function with new equipment from approved vendors. Carriers theoretically could attempt to plug upgrade or necessary replacement equipment from an approved manufacturer into clusters of equipment sourced from a disapproved company, but even if it works in the short term, the midand long-term viability of that arrangement and even the short-term performance efficiency remain highly uncertain. Many carriers thus will be forced to rip and replace their network equipment to stay competitive in today's marketplace—a business environment in which consistent performance is essential.

Perhaps more importantly, replacement service vendors require full access to all prior software code to ensure that the legacy equipment continues to function. But obtaining full access will likely be impossible. Software is proprietary and upgrades, patches, and other maintenance cannot be obtained unless and until it is licensed by the vendor of that software—in this case, the company with which transactions are proposed to be prohibited. The core also will likely need to be replaced, which exacerbates the compatibility problem for existing area equipment. There is little a third party can do. For example, one CCA member undertook

network migration from a non-Chinese-based vendor to a Chinese-based vendor, and in so doing, experienced equipment interoperability challenges that led to a network outage. The reality, therefore, is that even though the FCC intends its proposed rule to operate prospectively, it will have devastating and immediate retroactive effects.

Additionally, the level of pre-deployment testing that must be done to meet legitimate service expectations for new products requires significant research and development costs.

Those costs must be absorbed if carriers rip and replace network equipment. They also must be incurred if a carrier were to attempt to cobble together a mix-and-match network—without any real guarantee that a hodgepodge and shifting network infrastructure with new service providers can continue to meet service expectations in an uncontrolled environment. Even if research and development costs could be recovered, various "most favored nation" clauses in purchase contracts often place hard limits on pricing offered to smaller carriers.

Implementation of the proposed rule will cause immense financial harm to carriers. For example, one small- to mid-sized carrier with approximately 100,000 subscribers has estimated that the cost to replace all network equipment—including core, fiber, microwave, and wireless equipment—could approach \$300 million, which is three times the amount that the current vendor would charge for the same equipment. In addition, the carrier will have to spend \$60 million more for services. Finally, downtime from installing new equipment would cause the company to forego at least \$50 million in roaming fees. This *single carrier* estimates that it will likely lose approximately \$410 million if the proposed rule is adopted.⁸

⁸ See Decl. of Frank DiRico 3.

Many other carriers will suffer similarly catastrophic consequences to their financial viability. For example, one small carrier estimates a roughly \$100 million replacement cost for its network equipment alone, not including the cost of any additional services that will be required. The carrier also will risk nearly \$2 million in lost revenue from government contracts, nearly \$26 million of lost revenue from roaming arrangements, and approximately \$20 million of lost USF support annually during the transition from Huawei to a new supplier. This would be devastating to the carrier's business. Another CCA member serving just over 100,000 customers estimates nearly \$310 million in costs for new core and related equipment, an additional \$60 million in costs for services and maintenance, and a loss of approximately \$40 million in roaming revenue.

D. The Proposed Rule Will Deter Carriers from Adopting New Technologies and Investing in Their Networks.

The proposed rule will slow down or even entirely prevent adoption and integration of new technologies, such as 5G wireless capability, which runs counter to the FCC's stated priorities. CCA's members consistently provide wireless broadband access through their 4G networks and have made substantial progress in building out their 4G VoLTE capabilities. They have begun planning and testing for the eventual transition to 5G technology. Capital that would otherwise be put toward achieving the next generation of technology instead will be spent replacing current equipment. This trend is already evident: capital investments by CCA's

⁹ See Decl. of Eric J. Woody 2–3.

See, e.g., Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment, WT Docket No. 17-79, Second Report and Order, ¶ 4–5 (rel. Mar. 30, 2018) (discussing FCC's "efforts to reduce regulatory impediments" to "promot[e] this country's leadership in 5G").

carrier members declined precipitously in the first quarter of 2018, in large part because of anticipated tighter restrictions on carriers' access to equipment and services provided by certain foreign companies. At the current pace, for example, one of CCA's members is on track to invest approximately \$10,000 in network expansion in the first quarter of 2018. That same carrier invested over \$5.3 million in network expansion in 2017 and over \$5 million per year on average between 2012 and 2017. Uncertainty as to the next arbitrary regulation will restrict providers and investors from making long-term investments.

As another example, one CCA carrier member began installation of a new base station in a small southern town with a population of 26. However, due to recent actions by the administration, the member's vendor company has declined to complete software updates or to transfer software licenses, and the member has been unable to turn on LTE service as a result. That same CCA member has three more base stations which are scheduled to be deployed to provide wireless broadband services to other low-density areas where broadband service from the incumbent wireline carrier is unavailable or inadequate. However, the ability to complete that work will be stalled for the same licensing issue and fear of penalty. And another CCA carrier member reports that it has abruptly had to halt deployment for numerous additional coverage areas that were planned to occur over the next 12 to 24 months.

CCA members pride themselves on serving consumers in rural and remote areas, which are often the communities where the owners and employees of these carriers live and work, in no small part because serving rural and remote areas saves lives. One CCA member serving portions of rural Nevada deployed a cell tower in Death Valley National Park in Nevada. As a result of this carrier's efforts, "two French nationals, a 27-year-old man and a 21-year-old woman, were rescued from extreme heat . . . after making a phone call that may not have

connected before this cell tower was installed."¹¹ And when a small plane crashed in rural Wyoming, passengers were able to contact first responders because a small carrier whose network relies on Chinese equipment serves the remote area where the plane went down. Services from these two carriers offered the only area of coverage in otherwise "dead" zones. Looking forward, the FCC's proposed actions in this proceeding ultimately will stunt network expansion measures and will further expand the digital divide in rural areas.

E. The Proposed Rule Will Inflict Severe Harm on Rural Consumers.

The proposed rule will harm consumers, particularly those living in rural areas.

Coverage outages will proliferate as a result of some carriers shutting down and others going temporarily offline to replace equipment and perform the pre-deployment testing that must take place beforehand. In addition, replacement, maintenance, and repair services likely will be slower to respond, which could cause more frequent and longer outages. Those coverage voids are not mere annoyances. It is undisputable that "[h]igh-speed Internet access, or broadband, is critical to economic opportunity, job creation, education, and civic engagement." Coverage disruptions hinder business transactions, including small businesses trying to process credit card

[&]quot;New Cell Tower Helps Save Three Lives in Death Valley," Sierra Wave Media, https://www.sierrawave.net/new-cell-tower-helps-save-three-lives-in-death-valley/ (July 21, 2010).

Federal Communications Commission, *Bridging The Digital Divide For All Americans*, https://www.fcc.gov/about-fcc/fcc-initiatives/bridging-digital-divide-all-americans (last visited May 28, 2018). *See also*, Accenture, "How the Wireless Industry Powers the U.S. Economy" – A Study Commissioned by CTIA (rel. Apr. 5, 2018), *available at* https://www.ctia.org/news/study-reveals-powerful-economic-impact-of-wireless-across-50-states (noting, the "U.S. wireless industry contributes \$475 billion annually to America's economy and supports 4.7 million jobs").

payments; frustrate classroom curricula; and simply prevent people from connecting with each other. The time and capital carriers will have to spend addressing these problems will frustrate their ability to plan for and invest in 5G. Rural Americans must not be relegated to second-class status when it comes to communications access.¹³

Consumers will not only lose coverage, but also will be unable to update their devices.

The inability to update devices will make the network *less* secure as consumers would be unable to get critical security software updates—a very serious risk in a constantly evolving cybersecurity landscape.

In sum, the proposed rule's effects on telecommunications and information services access for underserved communities, especially rural areas, will be calamitous. It will take a decade or more to recover. During that time, the rest of the country and the rest of the world will continue to innovate in network and device technology, invest in those systems and support services, and improve the speed and quality of connectivity. All the while, rural America will fall further and further behind. This is not what Congress envisioned in 1934 when it created the FCC, nor in 1996 when it modernized the support system for high-cost areas and other underserved communities and institutions. Nor is it consistent with the Commission's stated priorities.

¹³ See id. ("Chairman Ajit Pai's top priority is to close the digital divide between those who have access to cutting-edge communications services and those who do not. He believes that every American who wants to participate in the digital economy should be able to do so.").

III. The Proposed Rule Exceeds the Commission's Statutory Authority.

The Commission claims that Sections 201 and 254 of the Communications Act "provide ample legal authority" for the proposed rule. ¹⁴ In the Commission's view, Section 201(b)'s grant of general rulemaking authority, and Section 254(e)'s direction that USF dollars shall be used "only for the provision, maintenance, and upgrading of facilities and services for which the support is intended," give the Commission the authority to institute an equipment vendor mandate. ¹⁵ The Commission also asserts that Congress's direction in § 254(c)(1) that the Commission should "periodically" update "the definition of the services that are supported by" the USF gives it the authority to issue the proposed rule because national security is an important "public interest."

None of this is correct. The Commission's general rulemaking authority must be exercised in accordance with the "[u]niversal service principles" set forth in Section 254(b). The proposed rule, however, *conflicts* with these principles. Whereas the principles emphasize the importance of preserving and expanding service for Americans in rural or underserved areas, the proposed rule will restrict and, in some cases, eliminate service for the very people the universal service mandate is intended to protect. Nor can the proposed rule be justified as a "re-definition" of universal service. The FCC's obligation to consider "the public interest" in defining universal service¹⁷ does not authorize the Commission to ignore or override the universal service

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¹⁴ NPRM ¶ 35.

¹⁵ *Id*.

¹⁶ *Id*. ¶ 36.

¹⁷ 47 U.S.C. § 254(c)(1)(D)

principles set forth by Congress in Section 254(b). The FCC's proposed rule, if adopted, will exceed the Commission's statutory authority and thus will violate the APA.¹⁸

A. The Proposed Rule Violates Section 254(b)'s Principles.

Congress directed the Commission to base its universal service rules on an enumerated list of policy principles. Section 254(b) provides that "the Commission *shall* base policies for the preservation and advancement of universal service on [specified] principles" (emphasis added). As the Tenth Circuit has explained, "[t]he plain text of the statute mandates that the FCC 'shall' base its universal policies on the principles listed in § 254(b). This language indicates a mandatory duty on the FCC."¹⁹ The specificity of Section 254(b) unquestionably controls over Section 201(b)'s general grant of rulemaking authority.²⁰

Although the Commission identifies some of the universal service principles codified in Section 254(b),²¹ the NPRM does not explain how the proposed rule furthers those principles. No doubt that is because the proposed rule—which will limit and, in some cases, cut off service to rural and underserved Americans—plainly undercuts and frustrates those principles. A rule that restricts or eliminates universal service indisputably conflicts with Section 254's mandate that FCC rules "preserve and advance" universal service.

As discussed above, the proposed rule will cause massive service disruptions in high-cost, rural areas and could result in higher consumer rates to attempt to offset the costs of replacing equipment and services currently provided by the targeted companies. Consumers who

¹⁸ See 5 U.S.C. § 706(2)(A), (C) (agency action must be set aside if it is "not in accordance with law" or "in excess of statutory jurisdiction, authority, or limitations").

¹⁹ Qwest Corp. v. FCC, 258 F.3d 1191, 1200 (10th Cir. 2001) ("Qwest I").

²⁰ Gozlon-Peretz v. United States, 498 U.S. 395, 407 (1991).

²¹ See NPRM ¶ 35

own phones and other devices manufactured by those companies will also be deprived of the ability to download critical software updates. The proposed rule will thus increase costs and reduce access to telecommunications and information services in the very places the USF was intended to support. Although network security is important, forcing rural carriers out of business "throws the baby out with the bathwater." Services are not "preserved" because consumer access will be reduced from current levels. And services are not "advanced" because investment, expansion, and growth will be chilled and discouraged. "The use of the conjunctive 'and' in the phrase 'preserve and advance universal service,' or 'preservation and advancement of universal service,' clearly indicates that the Commission cannot satisfy the statutory mandate by simply doing one or the other." The proposed rule does neither.

The proposed rule directly conflicts with every principle set forth in Section 254:

- <u>Subsection (b)(1) "Quality and rates."</u> By requiring USF-supported carriers to rebuild their networks at immense expense, the proposed rule will drive up rates without a proportionate increase in quality. This violates the principle that "[q]uality services should be available at just, reasonable, and affordable rates."
- Subsection (b)(2) "Access to advanced services." Whereas Congress emphasized the need for "[a]ccess to advanced telecommunications and information services . . . in all regions of the Nation," the proposed rule will have the effect of curtailing access to such services in rural and other areas of the nation with low population density. The FCC has reinforced the importance of this principle by expressly

²² Qwest Comms. Int'l, Inc. v. FCC, 398 F.3d 1222, 1236 (10th Cir. 2005) ("Qwest II").

- adopting "Support for Advanced Services" as an additional principle, which instructs the Commission to "direct[]" USF funds "where possible to networks that provide advanced services, as well as voice services."²³
- Subsection (b)(3) "Access in rural and high cost areas." The proposed rule will have a devastating effect on the services available to Americans in rural and high cost areas. Under the proposed rule, low-income Americans, and persons living in rural or high cost areas will *not* have services "that are reasonably comparable to those services provided in urban areas and that are available at rates that are reasonably comparable to rates charged for similar services in urban areas."
- <u>Subsection (b)(4) "Equitable and nondiscriminatory contributions."</u> The proposed rule blatantly violates this principle by forcing USF-supported carriers—and *only* USF-supported carriers—to remove the equipment, and forego the services, at issue. Singling out USF-supported carriers for inequitable and discriminatory treatment directly conflicts with the congressional judgment that "*[a]II* providers of telecommunications services should make an equitable and nondiscriminatory contribution to the preservation and advancement of universal service" (emphasis added).
- <u>Subsection (b)(5) "Specific and predictable support mechanisms."</u> The proposed rule is anything but "specific" and "predictable." It imposes a broad, vague, and uncertain mandate that upsets settled expectations and makes investment planning virtually impossible, as companies lack the knowledge to foresee which companies

²³ USF/ICC Transformation Order, 26 FCC Rcd 17679, ¶ 45.

could get added to the list of prohibited vendors. Beyond the clear suggestion that ZTE and Huawei will be placed on the list, it is far from clear what other companies might qualify for inclusion. Carriers will hesitate to invest in network equipment or devices that could end up prohibited on short notice, a reality already illustrated by the dramatically reduced investment in network expansion.

• Subsection (b)(6) – "Access to advanced telecommunications services for schools, health care, and libraries." By jeopardizing the continued provision of service to rural and underserved areas, the proposed rule threatens the ability of "schools and classrooms, health care providers, and libraries [to] access . . . advanced telecommunications services."

Because the proposed rule so clearly violates these six enumerated principles, the NPRM sidesteps any discussion of them and instead notes subsection (b)(7)'s language that the Commission may be guided by "[s]uch other principles as the Joint Board and the Commission determine are necessary and appropriate for the protection of the public interest, convenience, and necessity and are consistent with this chapter." But this provision cannot justify the proposed rule.

First, the Commission's vague articulation of the "public interest" cannot override the six specified principles in Section 254. Although the Commission "may exercise its discretion to balance the principles against one another when they conflict," it "may not depart from them altogether to achieve some other goal." Here, the Commission will be departing from all six specified principles to achieve a goal that is *not* specified in Section 254.

²⁴ *Qwest I*, 258 F.3d at 1200.

Second, if the Commission wishes to recognize a new principle using its subsection (b)(7) authority, it must first obtain a determination by the Federal-State Joint Board that the principle is "necessary and appropriate."²⁵ That determination can only be made through a notice-and-comment proceeding.²⁶

Third, it is neither "necessary" nor "appropriate" to single out network security as a universal service principle. It is not "necessary" because other agencies, such as DHS or DoC, are far better positioned to assess the national security risks posed by individual companies—and those agencies have a variety of ways to address the relevant risks. The Commission has declined to regulate in analogous circumstances.²⁷ And as the Supreme Court has cautioned quite recently, one agency will not receive deference if its interpretation of a statute "limits the work of a second statute" administered by a separate agency.²⁸ The FCC's work could ultimately curtail or cut short these agencies' due diligence. In this context, the FCC should allow other expert agencies to take the lead.

DHS is, in fact, currently assessing telecommunications supply chain risks. The National Protections and Program Directorate is expected to release a multi-faceted report by the end of summer 2018. The report likely will assess the telecommunication industry's risk for hardware,

²⁵ See 47 U.S.C. § 254(b)(7) (allowing adoption of "[s]uch other principles as the Joint Board and the Commission determine are necessary and appropriate" (emphasis added)).

²⁶ See Federal-State Joint Board on Universal Service, CC Docket No. 96-45, Report & Order, 12 FCC Rcd. 8799–806, ¶¶ 43–55 (rel. May 8, 1997) (considering and discussing comments on whether to adopt a new universal service principle).

See Restoring Internet Freedom, WC Docket No. 17-108, Declaratory Ruling, Report & Order, & Order, ¶¶ 140, 143–52 (rel. Jan. 4, 2018) ("Restoring Internet Freedom Order") (relying on sufficiency of antitrust law in addressing "conduct that harms Internet openness" as reason to repeal "net neutrality" order).

²⁸ Epic Systems Corp. v. Lewis, No. 16-285, slip op. at 20 (May 21, 2018).

software, and services, as well as perform targeted risk assessments based on specific threats, vulnerabilities, or entities at risk. The report likely also will examine specific threats to manufacturers, software designers, service providers, and hardware and software vulnerabilities within all sectors of the American telecommunications ecosystem.

This top-to-bottom assessment is viewed as part of a larger cybersecurity strategy aimed at protecting critical infrastructure, especially that which has become integrated with the internet. DHS identifies 16 sectors of critical infrastructure in the United States including communications and information technology. On May 15, 2018, DHS released its cybersecurity strategy, noting "[b]y 2023, the Department of Homeland Security will have improved national cybersecurity risk management by increasing security and resilience across government networks and critical infrastructure; decreasing illicit cyber activity; improving responses to cyber incidents; and fostering a more secure and reliable cyber ecosystem through a unified departmental approach, strong leadership, and close partnership with other federal and nonfederal entities." DHS plans to assess each of the 16 critical infrastructure sectors with a clearly defined strategic approach.

Further, DoC is already addressing supply chain risks. The agency is using its tools and authorities to take action against those companies it deems bad actors and security risks. In fact, DoC's April 15, 2018, Denial Order against ZTE has had serious impacts and is still being reviewed. The complexity and fluidity of that situation illustrates how ill-suited the FCC is to wade into complex security and trade issues. Excluding a company from U.S. markets can have

Office of Infrastructure Protection, U.S. Dep't of Homeland Sec., *Critical Infrastructure Sectors*, https://www.dhs.gov/critical-infrastructure-sectors (last updated July 11, 2017).

U.S. Dep't of Homeland Sec., Cybersecurity Strategy (May 15, 2018), *available at* https://www.dhs.gov/sites/default/files/publications/DHS-Cybersecurity-Strategy 1.pdf.

serious diplomatic consequences that the FCC and the Universal Service Administrative Company are not well positioned to anticipate or nimbly manage.

In addition to not being "necessary," recognizing network security as a universal service principle is not "appropriate," because it has the effect of singling out universal service recipients for discriminatory treatment. Confining the restriction to USF recipients is harmful to rural and regional carriers and the millions of Americans who rely on them. A discriminatory punitive sanction of this nature is not "appropriate," especially when the Commission can regulate more comprehensively.

It is more appropriate for DHS, rather than the FCC, to take the lead on issues pertaining to the national supply chain and national security. DHS is equipped with the necessary staff with required security clearances, internal infrastructure, critical expertise, and designated authority to thoroughly and thoughtfully determine risks and vulnerabilities within the telecommunications supply chain as well as any threats to national security that may arise. DHS can work with the intelligence community and process shared information about critical infrastructure risks far more ably than the Commission. The FCC should defer to DHS, and if helpful, provide technical expertise. For example, the FCC is currently awaiting the advice of its Communications Security, Reliability and Interoperability Council ("CSRIC"), which has a working group examining supply chain security.³¹ Heeding these recommendations prior to commencing a rulemaking better reflects the FCC's traditional and prudent practice of convening subject-matter experts to inform Commission policy.

See NPRM \P 9.

Finally, the proposed rule also violates the principle of competitive neutrality. The Commission long ago adopted the competitive neutrality principle pursuant to its

Section 254(b)(7) authority.³² "[C]ompetitive neutrality means that universal service support mechanisms and rules neither unfairly advantage nor disadvantage one provider over another, and neither unfairly favor nor disfavor one technology over another."³³ In that regard, the Commission pledged to "avoid limiting providers of universal service to modes of delivering that service that are . . . not cost effective."³⁴ This principle "should be considered in formulating universal service policies relating to each and every recipient and contributor to the universal service support mechanisms, regardless of size, status, or geographic location."³⁵ Competitive neutrality is a bedrock aspect of the USF regime that requires the FCC not to disadvantage one type of carrier.

The NPRM fails even to mention competitive neutrality, much less adhere to it. The proposed order will unfairly disadvantage rural and other USF-supported carriers by eliminating their ability to purchase cost-effective equipment, devices, and services. The many carriers who built their networks by using equipment from targeted companies did so precisely because those companies offered the most cost-effective products and services on the market. In some cases, those companies were effectively the *only* available providers of products and services. The

³² See Federal-State Joint Board on Universal Service, 12 FCC Rcd. 8779–806, ¶¶ 43–52.

³³ *Id.*, 12 FCC Rcd. 8801, ¶ 47.

³⁴ *Id.*, 12 FCC Rcd. 8802, ¶ 49.

³⁵ *Id*.

proposed rule unfairly disadvantages these carriers, thus violating the principle of competitive neutrality.

B. The Commission Cannot Rely on Its Authority to Define Universal Service to Impose an Equipment Vendor Mandate.

The Commission asks whether "adopting [the] proposed rule [will] be equivalent to establishing a new definition of" universal service under its Section 254(c)(1) authority.³⁶ The answer is no.

"Universal service" refers to a set of telecommunications services that the Commission is statutorily directed to achieve, maintain, and expand. The meaning of universal service is distinct from the individual *vendors* who provide the equipment and services that enable carriers to offer telecommunications services to their customers. This common-sense understanding of universal service is evident in the text of the statute itself, which defines universal service as "an evolving level of telecommunications services that the Commission shall establish periodically under this section, taking into account advances in telecommunications and information technologies and services."³⁷

The plain meaning of universal service is reinforced by the congressional mandate that "the Commission in establishing the definition of the services that are supported by Federal universal services support mechanisms shall consider the extent to which such telecommunications services are essential to education, public health, or public safety; have, through the operation of market choices by customers, been subscribed to by a substantial

³⁶ NPRM ¶ 36.

³⁷ 47 U.S.C. § 254(c)(1).

majority of residential customers; are being deployed in public telecommunications networks by telecommunications carriers; and are consistent with the public interest, convenience, and necessity."³⁸ This language establishes that universal service refers to a suite of services, or a group of specific functionalities, rather than to the *identity* of the equipment vendor who provides the technology that enables a carrier to offer these services and functionalities.

The statutory structure confirms this plain meaning. Section 254(b) sets forth the principles that must guide Commission rulemakings addressing universal service, and Section 254(c) gives the Commission authority to "establish periodically" the "evolving level of telecommunications services" that shall constitute universal service. If the Commission could evade the Section 254(b) principles simply by framing a funding restriction as a "re-definition" of universal service, Section 254(b) would be deprived of any constraining force, and its nondiscrimination and access-preservation goals would be rendered a practical nullity.

Even if the Commission could sidestep the clear statutory text and structure, the considerations identified in Section 254(c) cut against the proposed rule. There can be no dispute that the services at issue "are essential to education, public health, [and] public safety;" reflect "the operation of market choices by customers;" and "are being deployed in public telecommunications networks by telecommunications carriers." The NPRM refutes none of this. Instead, the NPRM relies once again on the "public interest" as a purported trump card that can override all other considerations. That is impermissible. The "public interest" factor must be read in harmony with the other factors, all of which underscore that universal service is meant to encompass important telecommunications services that are widely used by consumers in the free

³⁸ *Id.* (internal punctuation and numbering omitted).

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market. Invoking the "public interest" factor as way of smuggling in a consideration that is different in kind—network security—would violate the *ejusdem generis* canon, which holds that a final, catch-all item in a list should be read to include only things "of the same sort" as the other, specific items in the list.³⁹

Finally, the Commission overreads the Tenth Circuit's statement that "nothing in the statute limits the FCC's authority to place conditions . . . on the use of USF funds." *In re FCC 11-161*, 753 F.3d 1015, 1046 (10th Cir. 2014). That case had nothing to do with—and, thus, did not approve—a rule requiring or prohibiting the use of particular equipment vendors, much less a rule conditioning USF funds on national security determinations. The court's statement, moreover, did not concern whether a particular condition for USF eligibility was consistent with the statute. In fact, the court explained that the Commission's "funding directives" must be "consistent with the principles" enumerated by Congress in Section 254(b). 40 The court also noted that the Commission itself defended its regulation on the ground that it may "create inducements . . . to ensure that the universal service policies outlined in Section 254(b) are achieved." The Tenth Circuit's decision thus confirms that Commission rules and policies cannot conflict with the principles set forth in Section 254(b). 42

³⁹ See Scalia & Garner, Reading Law 199–200 (2012); see Epic Systems, No. 16-285, slip op. at 12.

⁴⁰ *In re FCC 11-161*, 753 F.3d at 1047.

⁴¹ *Id.* at 1045.

The Tenth Circuit also held that it was reasonable for the FCC to interpret Section 254(e)'s reference to the use of USF funds to support "facilities" as authority "to encourage the types of facilities that will best achieve the principles set forth in section 254(b)." *Id.* at 1046–47. But even a capacious reading of "facilities" cannot support a mandate that USF recipients contract only with specific vendors of equipment and services.

If the FCC were to move forward with re-defining "universal service" through its Section 254(c) authority, it first must submit the matter to the Joint Board for consideration and may adopt a new definition only if the Board has recommended that it do so. Under Section 254(c)(1), it is the Joint Board's responsibility to first "recommend[]... the definition of the services that are supported by" the USF. And Section 254(c)(2) confirms that the "Joint Board may, from time to time, recommend to the Commission modifications in the definition of the services that are supported by Federal universal service support mechanisms." The statute is clear that the Commission cannot re-define "universal service" unless it works through and with the Joint Board.

C. Other Statutes Support CCA's Reading of the Universal Service Statute.

Congress has repeatedly codified its policy of encouraging universal access to advanced telecommunications and information services through pro-competitive and deregulatory methods. In 1934, Congress created the FCC "[f]or the purpose" of "mak[ing] available, so far as possible, to *all* the people of the United States . . . a rapid, efficient, Nation-wide, and world-wide . . . communication service with adequate facilities at reasonable charges." Congress has instructed the Commission "to promote the continued development of the Internet and other interactive computer services" while "preserv[ing] the vibrant and competitive free market that presently exists." Section 706(a) of the Telecommunications Act, furthermore, directs the Commission to

⁴³ 47 U.S.C. § 151 (emphasis added).

⁴⁴ 47 U.S.C. § 230(b).

encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to *all* Americans . . . by utilizing, in a manner consistent with the public interest, convenience, and necessity, price cap regulation, regulatory forbearance, *measures that promote competition* in the local telecommunications market, or other regulating methods that *remove barriers to infrastructure investment*. ⁴⁵

If that were not clear on its own, Section 706(b) of the Telecommunications Act tells the Commission to "determine whether advanced telecommunications capability is being deployed to *all Americans* in a reasonable and timely fashion," and, if it is not, to "take immediate action to accelerate deployment of such capability by *removing barriers to infrastructure investment* and by *promoting competition* in the telecommunications market."⁴⁶ As the Commission has recently explained, these provisions "exhort[] the Commission to exercise market-based or deregulatory authority granted under other statutory provisions" to support universal service.⁴⁷

By eliminating a major part of the market for lower-priced network equipment and services, however, the proposed rule contravenes Congress' clearly stated policy. The proposed rule stifles competition and promotes conglomeration throughout the supply chain. It will eliminate access for many rural Americans—and increase prices and reduce market choices for everyone else.

IV. The Proposed Rule Is Flawed in Many Respects.

There are other serious deficiencies in the proposed rule that render it invalid under the Administrative Procedure Act.⁴⁸ Among other things, the immense costs of the rule massively

⁴⁶ 47 U.S.C. § 1302(b) (emphases added).

⁴⁵ 47 U.S.C. § 1302(a) (emphases added).

⁴⁷ Restoring Internet Freedom Order, ¶ 270.

⁴⁸ See 5 U.S.C. § 706(2)(A) (agency action must be set aside if it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law").

outweigh the unspecified benefits; the rule unfairly singles out and discriminates against USF-supported carriers, contrary to the USF's purpose; and even assuming the importance of securing the supply chain, the Commission has failed to tailor the rule to the danger at issue. The Commission's approach is directly contrary to the President's emphasis on reducing the regulatory burden on private business.⁴⁹

A. The Proposed Rule's Costs Substantially Outweigh Its Benefits.

1. The Commission must give "at least some attention to cost" in all of its rulemakings. ⁵⁰ That requirement is embedded within the Commission's general rulemaking power as well as the "public interest" provisions the Commission cites as the authority for this rulemaking. ⁵¹ Moreover, Congress has required the Commission to administer the USF pursuant to the policies enumerated in Section 254(b). Those policies emphasize ensuring the affordability of access and providing sufficient financial support to carriers serving rural and high-cost areas. For this reason, as well, the Commission has a "statutory responsibility to determine the likely economic consequences" of the proposed rule. ⁵²

⁴⁹ See Exec. Order No. 13,771, Reducing Regulation and Controlling Regulatory Costs, 82 Fed. Reg. 9,339 (Feb. 3, 2017).

⁵⁰ *Michigan v. EPA*, 135 S. Ct. 2699, 2707 (2015).

Compare id. at 2607–08 (statute authorizing agency to promulgate "appropriate and necessary" regulations require agency to consider cost), with 47 U.S.C. § 201(b) ("The Commission may prescribe such rules and regulations as may be necessary in the public interest to carry out the provisions of this chapter."), id. § 254(b)(7) (authorizing the Commission to adopt universal service principles that "are necessary and appropriate for the protection of the public interest, convenience, and necessity and are consistent with this chapter"), and id. § 254(c)(1) (requiring the Commission to "establish periodically" a definition of universal service that is, inter alia, "consistent with the public interest, convenience, and necessity").

⁵² Bus. Roundtable v. SEC, 647 F.3d 1144, 1148 (D.C. Cir. 2011).

The Commission must identify and weigh the costs and benefits of the proposed rule and furnish a reasoned analysis of why the benefits exceed the costs.⁵³ The agency must "quantify" the costs or "explain why those costs could not be quantified."⁵⁴ The agency's analysis also must "account[] for benefits as well as costs,"⁵⁵ but cannot engage in a "sham" exercise wherein the "cost-benefit analysis' would always be tipped in favor of benefits."⁵⁶ "Simple logic, fairness, and the premises of cost-benefit analysis . . . demand that a cost-benefit analysis be carried out objectively."⁵⁷ In fact, Chairman Pai has long been a supporter of focusing on economics and championed the creation of the Office of Economics and Analytics, which is responsible for conducting cost-benefit analyses.⁵⁸ Unfortunately, the proposed rule imposes costs and detrimental impacts on carriers, consumers and markets and therefore the benefit of those actions could only be justified in the public interest if the reasons are unambiguous, convincing and actually promote nationwide solutions to the national security threat. It does not do this.

⁵³ See Michigan, 135 S. Ct. at 2707 ("Agencies have long treated cost as a centrally relevant factor when deciding whether to regulate. Consideration of cost reflects the understanding that reasonable regulation ordinarily requires paying attention to the advantages *and* the disadvantages of agency decisions.").

⁵⁴ Bus. Roundtable, 647 F.3d at 1149.

⁵⁵ *Pub. Citizen v. Fed. Motor Carrier Safety Admin.*, 374 F.3d 1209, 1222 (D.C. Cir. 2004).

⁵⁶ Sierra Club v. Sigler, 695 F.2d 957, 979 (5th Cir. 1983).

⁵⁷ *Id.*; *Bus. Roundtable*, 647 F.3d at 1148–49 (rule was arbitrary and capricious because SEC "inconsistently and opportunistically framed the costs and benefits of the rule").

See Establishment of the Office of Economics & Analytics, MD Docket No. 18-3, Order, $\P\P$ 3, 5 (rel. Jan. 31, 2018); 47 C.F.R. § 0.21(b)–(c), (e), (h), (j).

2. The proposed rule's immense costs will disproportionately harm small and midsized carriers that provide service in rural areas, including through roaming agreements with
larger carriers.⁵⁹ The proposed rule will put some carriers out of business and disrupt the
services provided by other carriers. Carriers will be unable to efficiently maintain and service
the equipment they have in place. Outages will inevitably occur, both as a result of carriers
shutting down and from the downtime necessary to replace equipment. Outages frustrate
businesses, schools, and families in their everyday activities. They also endanger public safety;
for example, people will be unable to call 911 or use their phones to get driving directions to the
closest hospital. Moreover, consumers will be unable to update their devices' software. The
inability to update software will prevent consumers from installing new security patches on their
devices, increasing the risk of a breach. All of these harms will disproportionately fall on
Americans living in rural areas—the regions of the nation that are least served by
telecommunications and information services.

Moreover, the proposed rule will raise the cost of investing in replacement equipment.

There is little certainty that a company that is approved today will not find itself targeted tomorrow; that uncertainty comes at a substantial cost to carriers deciding among vendors. And by pushing low-cost manufacturers and service-providers out of the market, the proposed rule will increase the price of other equipment and services, both because the lower end of the market has been chopped off, and because demand for the higher end of the market will increase without any assurance that existing manufacturers and service-providers can meet that demand with

⁵⁹ See supra Part II.

increased supply. Based on its members' experiences, CCA is particularly concerned that maintenance services will be inadequate, which will result in more frequent and longer outages.

The Commission recognized that thousands of small entities—carriers, healthcare providers, schools, and others—will be affected by the proposed rule. But the Commission has not even attempted a preliminary estimate of the costs those small entities will shoulder if the proposed rule is adopted. In performing the analysis required by the Regulatory Flexibility Act, the FCC should carefully consider not just the direct impacts on small carriers, but also the trickle-down effects on other small entities in rural areas, including network outages and potential increases in carrier rates necessary to recoup a portion of the losses caused by the proposed rule. In light of these potentially crippling costs, the Commission has a further obligation "to minimize the significant economic impact" the proposed rule will impose on small entities, such as by adopting measures that might mitigate the harm the proposed rule will cause.

3. In evaluating cost, the Commission also must take into account the carriers' substantial reliance interests. There can be no serious dispute that the proposed rule will "make[] worthless substantial past investment incurred in reliance upon" current law and Commission policy. Although the Commission states that "the proposed rule would not apply to equipment already in place," the rule will destroy much or all of the value of that equipment. Networks that incorporate the targeted equipment will not last long without software and

⁶⁰ See NPRM, Appendix B ¶¶ 8–55.

⁶¹ 5 U.S.C. § 604(a)(6); see infra Part VI.

⁶² Bowen v. Georgetown Univ. Hosp., 488 U.S. 204, 220 (1988) (Scalia, J., concurring).

⁶³ NPRM ¶ 18.

hardware upgrades and services. Even if the proposed rule does not expressly mandate that existing equipment be removed from the network, that is the rule's inevitable effect, because it prohibits the expenditure of USF funds on replacement equipment, upgrades, maintenance, service, and support provided by the targeted vendors.

In building their networks, carriers relied on the fact that this equipment was lawful.

They did not have notice that the Commission would do an about-face and effectively outlaw this equipment. CCA is unaware of any instance where the Commission has banned USF recipients from purchasing products or services from a particular company, much less two of the market's largest vendors. On the contrary, the Commission *encouraged* carriers to provide lowcost access to telecommunications and information services, which incentivized the purchase, deployment, and use of cost-effective equipment, devices, and services. Destroying reliance interests in this way—with no notice and no counterbalancing compensation—amounts to arbitrary agency action.

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The Commission's current USF policies do not discriminate against products sold by particular foreign companies. If the Commission now seeks to take a different approach, it "must be cognizant that longstanding policies may have 'engendered serious reliance interests that must be taken into account." Where, as here, "decades of industry reliance on the

⁶⁴ Contributing to the problem, the FCC's reverse auction mechanism to distribute USF support encourages lowest priced bids and lower overall costs.

⁶⁵ See Bell Atl. Tel. Cos. v. FCC, 79 F.3d 1195, 1207 (D.C. Cir. 1996) (finding the rule in question valid because the "state of the law has never been clear" and regulated entities received "the benefit of their bargain").

⁶⁶ Encino Motorcars, LLC v. Navarro, 136 S. Ct. 2117, 2126 (2016) (quoting FCC vs. Fox Television Stations, Inc., 556 U.S. 502, 515 (2009)).

[Commission's] prior policy" is involved, it is particularly important to provide a fulsome explanation for why the agency is changing direction.⁶⁷

4. The benefits of the proposed rule cannot sustain the immense costs the proposed rule will impose on smaller carriers and rural consumers. In fact, it is unclear from the NPRM exactly what benefits the Commission contemplates—a point that is underscored by the Commission's acknowledgment that it is not sure what benefits might flow from the rule, and how those benefits might be quantified.⁶⁸

The Commission cannot rely on unspecified security concerns as a way of calculating benefits, but must "provide[]... evidence of a real problem" that the proposed rule will solve or mitigate.⁶⁹ The Commission cannot discharge this duty simply by citing a congressional report from 2012 that itself lacks any detail on the risks posed by targeted companies.⁷⁰ An agency's obligation to identify and calculate a rule's benefits applies with particular force where, as here, the benefits must be significant if they are to outweigh the rule's undeniably substantial costs. To "justif[y] such costly prophylactic rules," the agency "need[s] to explain how the potential danger" will be averted by the regulation.⁷¹ The Commission has not done so here.

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⁶⁷ *Id.* at 2126–27.

⁶⁸ See NPRM ¶ 33 ("Does this proposed rule improve our ability to safeguard the country's telecommunications networks from potential security risks? How can we quantify any such benefit to national security?").

⁶⁹ Nat'l Fuel Gas Supply Corp. v. FERC, 468 F.3d 831, 841 (D.C. Cir. 2006).

⁷⁰ See NPRM ¶¶ 4–5.

⁷¹ *Nat'l Fuel Gas Supply Corp.*, 468 F.3d at 844.

- B. The Proposed Rule Singles Out Smaller, Rural Carriers for Discriminatory Treatment, Contrary to the Very Purpose of the Universal Service Fund.
- 1. The proposed rule targets only one small portion of the sprawling and multifaceted American telecommunications network: carriers that receive USF funds. These carriers, who disproportionately serve rural areas, represent only one segment of the vast telecommunications and information services marketplaces. The proposed rule does not prevent networks operated by carriers covered by the proposed rule from interconnecting with networks operated by carriers that the rule does not cover and that may continue to use targeted equipment and services. Not only are some networks interconnected, but consumers may access noncovered networks through roaming agreements their carriers have with carriers whose networks are not directly affected by the proposed rule. And under the proposed rule, consumers will be allowed to purchase phones manufactured by targeted companies, so long as they do not buy them *from* carriers who receive USF money. The proposed rule thus harms the most vulnerable while doing little to address risks that may be posed by particular equipment, services, or devices in the rest of the country. An agency cannot ignore "an important aspect of the problem."⁷² Indeed, "[s]uch an artificial narrowing of the scope of the regulatory problem," as the Commission proposes here, "is itself arbitrary and capricious."⁷³

At a minimum, the Commission should address the use of USF funds to purchase certain equipment and services that may pose a national security risk only within the context of a comprehensive rulemaking that considers *all* telecommunications providers and *all* uses of the

Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983).

⁷³ Home Box Office, Inc. v. FCC, 567 F.2d 9, 36 (D.C. Cir. 1977).

relevant equipment and services. The Commission has offered no reason to believe that the products and services in question are used only by USF recipients and their customers.

2. The proposed rule is directly contrary to the USF's very purpose: supporting carriers that provide service to rural and low-density regions of the country. Since its inception in 1934, the Commission has been tasked with "mak[ing] available, so far as possible, to all the people of the United States . . . a rapid, efficient, Nation-wide, and world-wide . . . communication service with adequate facilities at reasonable charges." This ultimate policy objective—now known as "universal service" "has remained a consistent and fundamental goal for the FCC, even as the nature of that service and the regulatory means of achieving it have changed."

Congress has determined that universal service, which means *affordable* access,⁷⁷ should be promoted through the USF. The USF is intended to *assist* carriers in providing "services for high-cost, hard-to-reach rural areas, as well as indigent households and local institutions like schools, hospitals, and libraries." The USF supplies "financial support in providing those critical services." The USF's purpose is to help smaller and often rural carriers shoulder the economic burden of building out networks to reach the underserved and to provide products and services at affordable prices.

⁷⁴ 47 U.S.C. § 151.

⁷⁵ See id. § 254

⁷⁶ AT&T, Inc. v. FCC, 886 F.3d 1236, 1241 (D.C. Cir. 2018).

⁷⁷ See 47 U.S.C. § 254(b)(1).

⁷⁸ *AT&T*, 886 F.3d at 1242.

⁷⁹ *Id*.

The proposed rule directly contradicts that purpose by imposing substantial costs on primarily rural carriers to the detriment of underserved populations. Moreover, the FCC's proposed rule could eliminate a substantial portion of the supplier market for core network equipment. While there are a myriad of suppliers for discrete network components, a carrier's core network could likely be the most vulnerable to harmful attacks. As discussed above, the rule therefore conflicts with the Section 254(b) principles. For the same reasons, it violates the APA, as an agency action that "fail[s] to consider . . . a factor the agency must consider under its organic statute" is arbitrary and capricious. Si

C. The Commission Has Not Identified Evidence Supporting Its Proposed Rule, Nor Has It Tailored the Rule to the Asserted Risk.

The Commission has failed to identify evidence supporting the broad prohibitions contemplated by the proposed rule. An agency must base its rules on the evidence before the agency and cannot rely on unsupported assumptions. ⁸² Indeed, agencies are obligated to demonstrate that their proposals are founded on and responsive to real problems. Here, the nature of the problems that the FCC is trying to address is not explained or established with evidence. To the contrary, the NPRM rests on premises that are *not* supported by any evidence identified by the Commission—and the Commission gives no reason for why the sweeping prohibitions it proposes are necessary in light of the dangers in question, or why its rule could

The proposed rule will reduce the number of suppliers of core network equipment from five to three. There are additional providers of discrete network components.

⁸¹ *Pub. Citizen*, 374 F.3d at 1216.

⁸² Motor Vehicle Mfrs. Ass'n, 463 U.S. at 43.

not be more narrowly tailored.⁸³ This is not to minimize the seriousness or credibility of those federal agencies that may have identified concerns. But it does highlight that confidential, vague, and undifferentiated security concerns are not a sound foundation for transparent and robust agency action, which must provide notice of the basis for a rule and the opportunity to contest that basis.

The Commission has not explained why it proposes to target *companies* instead of *products*, when it is the equipment and devices that allegedly create the security risk.⁸⁴ There are valid reasons to believe that not all Huawei and ZTE products and services create security risks. For example, one European country recently approved Huawei 5G base stations.⁸⁵ And it is hard to understand how many run-of-the-mill products and services, such as routine maintenance work on existing equipment, pose a significant security threat.

Although the Commission notes that actor-specific prohibitions in the context of sensitive government contracts and grants exist or are being actively considered, ⁸⁶ it offers no explanation as to why the same risks are present in the context of ordinary consumer use. In fact, the Commission provides no evidence supporting its apparent belief that the targeted equipment or services cannot be used in a safe way. The FCC has asked "which components or services are

⁸³ See Del. Dep't of Nat. Res. & Envtl. Control v. EPA, 785 F.3d 1, 16–18 (D.C. Cir. 2015) (holding that an "overbroad" regulation was "not rational" where "reasonable alternatives" were not "address[ed]").

⁸⁴ See NPRM ¶ 15 (requesting comment on this issue).

⁸⁵ Juan Pedro Tomás, *Huawei gets approval to ship 5G base stations to the EU*, RCR Wireless News, https://www.rcrwireless.com/20180423/5g/huawei-gets-approval-ship-5g-base-stations-eu-tag23 (Apr. 23, 2018).

⁸⁶ See NPRM ¶¶ 6–7.

most prone to supply chain vulnerabilities" and whether "equipment can be certified not to present a supply chain risk," among many other questions. But without an explanation of what that supply chain risk *is*, it is difficult for stakeholders to address the Commission's questions. Nor has the Commission examined the different risk portfolios of software services and physical maintenance services. It is difficult for stakeholders to adequately comment on the myriad possible permutations of equipment and services—not to mention vendors—the Commission could cover in its rule without the agency identifying the specific security risks it is attempting to address.

The Commission identifies no evidence suggesting that networks owned by carriers receiving USF support pose a special or unique danger. Congress knows how to identify networks that require special rules. In the Spectrum Act, Congress prohibited recipients of grants allocated for the public safety broadband network from using those funds to pay anyone barred by a federal agency "from bidding on a contract, participating in an auction, or receiving a grant." But Congress has been silent with respect to USF funds, and the Commission has pointed to no reason that rural carriers, hospitals, schools, or libraries are the focal point of the country's network vulnerabilities.

Essentially the entirety of the FCC's cited evidence consists of an October 2012 report by the House Permanent Select Committee on Intelligence ("HPSCI").⁸⁹ But the report cites no

⁸⁷ NPRM ¶ 15.

⁸⁸ 47 U.S.C. § 1404(a), (c); *id.* § 1426(e) (establishing the Network Construction Fund); *id.* § 1442 (establishing a state and local implementation grant program).

Permanent Select Committee on Intelligence, U.S. House of Representatives, *Investigative Report on the U.S. National Security Issues Posed by Chinese Telecommunications Companies Huawei and ZTE* (Oct. 8, 2012) (cited in NPRM ¶ 4).

specific evidence that Huawei or ZTE equipment and services create cybersecurity risk. Nothing in the report explains specifically how those products and services are unsafe for use by American carriers. Furthermore, if Huawei and ZTE presented such a high level of danger in 2012, why is this report still the critical piece of evidence *in 2018*? Carriers and other stakeholders cannot effectively evaluate and take actions to address cybersecurity threats, including risks in the supply chain, if they are kept in the dark. That is why HPSCI recommended that the intelligence community "should actively seek to keep cleared private sector actors as informed of the threat as possible" and that Congress should enact legislation aimed at "increasing information sharing among private sector entities." 90

All indications suggest that the Commission is rushing to do something to address a problem that is little understood, or at least a problem that has not been explained to stakeholders and other members of the regulated public. As a result, it is unlikely that this NPRM will result in "a record enabling [a court] to see why the agency reacted to major issues of policy as it did." Without a more focused inquiry and a presentation of evidence supporting the rulemaking, a court will be unable to "fathom how the Commission reached the conclusion that the balance here should be struck in favor of regulation."

V. The Proposed Rule Is Unconstitutional.

The proposed rule raises serious constitutional questions by interfering with longstanding investment-backed expectations and depriving rural carriers of any economically beneficial use of their property. Absent a provision making these carriers whole for the devastating economic

⁹⁰ *Id.* vi–vii, 45–46.

Home Box Office, 567 F.2d at 41 (internal quotation marks and alterations omitted).

⁹² *Id*.

losses they will undeniably suffer, the proposed rule violates due process and amounts to an uncompensated regulatory taking.

A. The Proposed Rule Violates Due Process.

The Commission's proposed rule will violate carriers' due process rights in two ways. First, the rule will eviscerate carriers' longstanding investment-backed reliance interests. 93

When carriers made their investments over the past decade or more, they "did not have fair notice of what [would be] forbidden." Indeed, many carriers have recently upgraded, or are continuing to transition, their networks to the newest available technologies. The rule will "deprive citizens of legitimate expectations and upset settled transactions." Carriers did not "kn[o]w they were taking a risk in" entering contracts with foreign suppliers. Rather, they believed they were following the USF's mandate to provide affordable telecommunications access to underserved communities. The proposed rule is unconstitutional because it unfairly interferes with carriers' legitimate expectations without sufficient justification. The Commission's rule narrowly targets USF recipients without providing any evidence that the problem is limited to that segment of the market or that the rule will make a material impact on the security of the telecommunications network as a whole.

Second, the proposed rule fails to provide an opportunity to review "the unclassified evidence on which the official actor relied," thereby violating the due process rights of

⁹⁴ FCC v. Fox Television Stations, Inc., 567 U.S. 239, 254 (2012).

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⁹³ See supra Part IV.A.3.

⁹⁵ Gen. Motors Corp. v. Romein, 503 U.S. 181, 191 (1992).

⁹⁶ *Id.* at 192.

equipment, device, and service providers, as well as the carriers who rely on them.⁹⁷ These stakeholders do not have a real "opportunity to rebut" the evidence regarding network security risks because essentially no evidence has been offered.⁹⁸ The Commission so far has relied primarily on a House committee report that is almost six years old and that does not provide specific evidence regarding alleged security risks of using suspect companies' equipment, devices, and services.⁹⁹ Failing to present directly affected entities with the evidence relied upon by the Commission will infringe the due process rights of those affected entities.

B. The Proposed Rule Results in Unconstitutional Regulatory Takings.

The proposed rule also will result in unconstitutional regulatory takings. Carriers will be unable to continue using their property because they will be prevented from upgrading or repairing their networks and their software components. By depriving carriers of the ability to obtain the products and services they need to continue using the equipment and devices they have already purchased, the proposed rule effectively "denies all economically beneficial or productive use" of their property. 100

Similarly, the proposed rule extinguishes the expected value of already purchased equipment and of contracts that contemplate future transactions. Even a law "that substantially furthers important public policies may so frustrate distinct investment-backed expectations as to

⁹⁹ See NPRM ¶ 4.

⁹⁷ *Ralls Corp. v. Comm. on Foreign Inv. in the U.S.*, 758 F.3d 296, 319 (D.C. Cir. 2014).

⁹⁸ *Id*.

¹⁰⁰ Lucas v. S.C. Coastal Council, 505 U.S. 1003, 1015 (1992).

amount to a 'taking.'"¹⁰¹ And if the "economic impact of the regulation on the claimant" is substantial and "the character of the governmental action" is direct, as opposed to generally applicable, the regulation is more likely to be a taking.¹⁰² The Commission's ends may be laudatory, but that cannot salvage a regulation that frustrates significant investment-backed expectations and will cause devastating economic injury. Nor is the regulation "a general regulation" of the kind that often survive takings challenges.¹⁰³ Rather, this regulation targets specific entities: USF recipients who purchase equipment, devices, and services from companies deemed to pose a security risk. That the restriction on purchasing upgrades and services arose *after* carriers bought and installed their equipment and devices underscores that the proposed rule will result in unconstitutional regulatory takings.¹⁰⁴

A well-established indicator of an unconstitutional taking is when the costs of a "public interest" regulation are concentrated on the property owner. Here, rural carriers will disproportionately bear the burden for the security of the entirety of the nation's telecommunications network. "The bedrock principle of the Takings Clause, whatever doctrinal form cases interpreting it may take, has been consistently reiterated by the Supreme Court. It is that the Takings Clause is 'designed to bar Government from forcing some people alone to bear

¹⁰¹ Penn Cent. Transp. Co. v. City of New York, 438 U.S. 104, 127 (1978).

Connolly v. Pension Benefit Guar. Corp., 475 U.S. 211, 225 (1986) (quoting Penn Central, 438 U.S. at 124).

¹⁰³ Dist. Intown Props. Ltd. P'ship v. Dist. of Columbia, 198 F.3d 874, 883 (D.C. Cir. 1999).

¹⁰⁴ *Cf. Murr v. Wisconsin*, 137 S. Ct. 1933, 1944 (2017) ("a use restriction which is triggered only after[]...a change in ownership should also guide a court's assessment of reasonable private expectations").

public burdens which, in all fairness and justice, should be borne by the public as a whole."¹⁰⁵ Rural carriers whose businesses will be destroyed or severely burdened by the proposed rule will obviously not receive a "benefit . . . roughly commensurate with the burdens they [will be] forced to bear."¹⁰⁶ Without at the very least providing additional funding to compensate these carriers for the losses they will suffer, the proposed rule will run afoul of the Fifth Amendment.

VI. If the Commission Proceeds with a Rule, It Should Make Substantial Changes to Mitigate the Proposed Rule's Harmful Impact.

The proposed rule threatens USF-supported carriers with economic devastation and poses serious dangers to consumers and public safety. In the event the Commission intends to move forward with this rulemaking, which we urge it not to do, it should adopt common-sense provisions to mitigate those harms, including the following:

• Narrow the rule's scope. Limit the rule to particular types of equipment, devices, and/or services that, based on specific record evidence, present legitimate security risks that cannot be fixed through software patching or other mechanisms. Parents, subsidiaries, and affiliates of listed companies should not be automatically covered, but rather should be reviewed independently using the same criteria. The Commission also should make it very clear that the rule only applies to direct spending on prohibited equipment, devices, and/or services. If the rule extends to funding of projects and services that utilize targeted equipment, devices, or services,

¹⁰⁵ Colo. Springs Prod. Credit Ass'n v. Farm Credit Admin., 967 F.2d 648, 654 (D.C. Cir. 1992) (quoting Armstrong v. United States, 364 U.S. 40, 49 (1960)).

¹⁰⁶ *Id.* at 655.

that would drastically increase the odds that any given carrier will have to rip and replace substantial portions of its network; that result would render meaningless the FCC's assurance that it seeks only to regulate on a "going forward" basis.¹⁰⁷

- Adequate transitional funding. Provide additional USF or other funds to offset the
 costs of compliance, especially for rural carriers who lack ready access to costeffective replacement equipment and reliable substitute services.¹⁰⁸
- Sufficient compliance period. Provide a sufficient phase-in period and/or delayed compliance date. Small to mid-sized rural carriers could need 10 years to replace network equipment and ensure an orderly and smooth transition. And the longer the period carriers have to comply, the greater ability they have to spread out costs to try to lessen the proposed rule's crippling financial impact. The compliance date, therefore, should be ten years after adoption of a final rule. If the FCC can show that certain equipment or services pose a more immediate danger, or a relatively serious security risk, a tiered phase-in period would be appropriate. Use of USF funds for Tier 1 equipment or services (immediately dangerous) would be prohibited three years post-adoption; use of USF funds for Tier 2 equipment or services (security risk is serious, but not immediate) would be prohibited six years post-adoption; use of USF funds for Tier 3 equipment or services (security risk is documented, but not as serious) would be prohibited ten years post-adoption.

¹⁰⁷ NPRM ¶¶ 2, 13.

¹⁰⁸ See AT&T, 886 F.3d at 1251 (holding that "additional funding" created a "safety valve" that assured "the scheme will not, in practice, be 'unfair' to" adversely affected entities).

- Waivers. Create a robust and meaningful waiver process using the traditional "good cause" standard provided in 47 C.F.R. § 1.3. 109 Important considerations should include, without limitation: the applicant's financial situation; the availability and price of alternative sources of equipment, devices, or services; and any documented support (including certifications, if available) regarding the safety of particular equipment, devices, or services. The Wireless Bureau is in the best position to assess whether a USF recipient has provided adequate justification for a waiver. Denials of applications for waivers should be appealable within the Commission to ensure fair, thorough, and consistent consideration.
- Grandfather contracts. Grandfather existing contracts, including multiyear contracts and contracts for future upgrades and/or services. Without a provision allowing for upgrades to and services for existing equipment, carriers will be forced to rip and replace all equipment purchased from now-prohibited entities. Change-in-law provisions, if they exist, would not solve that problem.
- Grandfather existing equipment. Allow upgrades to and services for existing equipment, regardless of whether a contract for upgrades and/or services is currently in place. Carriers have made substantial investments in their networks, based on existing law and Commission policy. Prohibiting upgrades and services would be

¹⁰⁹ See Vt. Pub. Serv. Bd. v. FCC, 661 F.3d 54, 65 (D.C. Cir. 2011) (noting that a waiver "process is a 'sign of reasonableness," and "an effort by an agency 'to cabin" the regulation's "potential sweep" (quoting Nat. Res. Def. Council v. EPA, 822 F.2d 104, 120 (D.C. Cir. 1987)); Rural Cellular Ass'n v. FCC, 588 F.3d 1095, 1104–05 (D.C. Cir. 2009) (assessing rule's fairness by looking to whether regulated parties had a meaningful opportunity "to obtain an exception").

unfairly retroactive and would destroy those reasonable investment-backed expectations.

• <u>Grandfather devices.</u> Grandfather already purchased consumer devices, such as phones and tablets, including software updates and other related services.

VII. The FCC Should Issue a Further NPRM with an Updated, More Detailed Proposed Rule.

Any final rule that results from the Commission's NPRM is likely to be far more elaborate than the proposed rule. But without a more detailed proposed rule, the affected parties will be deprived of the chance to provide input on the regulations that will have a substantial effect on their businesses, and the FCC will be deprived of input that would help tailor the rule to maximize the accomplishment of its goals and minimize the costs. Other governmental bodies also are studying vulnerabilities in our nation's telecommunications network supply chain. As noted above, for example, DHS is on track to issue a detailed report later this summer. The FCC's final rule likely will take into account developments such as the DHS report—potentially important evidence that stakeholders will not have had an opportunity to comment on in the context of the FCC's proposed rulemaking. Importantly, the FCC must engage in a more focused dialogue with national security expert agencies to effectively address communications supply chain concerns to attack the problem holistically.

If the Commission issues a final rule without first seeking additional comment to address these developments, it will violate the Administrative Procedure Act's notice-and-comment

requirements.¹¹⁰ The logical-outgrowth doctrine has limits.¹¹¹ There is little indication here what a final rule might look like. The NPRM poses 50 more express questions (87) than there are words in the proposed rule (37). CCA has attempted to answer the Commission's questions to the best of its ability and to suggest options the Commission might consider. But because the Commission has not put forward "a concrete and focused" proposal, the Commission has failed "to make criticism or formulation of alternatives possible."¹¹² And without sufficient notice, the Commission is unlikely to meet "its obligation to make a record enabling [a reviewing court] to see why the agency reacted to major issues of policy as it did."¹¹³

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¹¹⁰ 5 U.S.C. § 553.

¹¹¹ See, e.g., Small Refiner Lead Phase-Down Task Force v. EPA, 705 F.2d 506, 549 (D.C. Cir. 1983) ("This purported notice, however, is too general to be adequate. Agency notice must describe the range of alternatives being considered with reasonable specificity. Otherwise, interested parties will not know what to comment on, and notice will not lead to better-informed agency decisionmaking.").

¹¹² *Home Box Office*, 567 F.2d at 36.

¹¹³ *Id.* at 41 (internal quotation marks and alterations omitted).

VIII. Conclusion.

The Commission's intentions are laudable. But the proposed rule is not a proper or effective means of furthering national security. The Commission should withdraw the proposed rule. At the very least, the Commission should substantially revise the proposed rule to mitigate the immense harms it will engender and request further comment on the revised proposal.

Respectfully submitted,

/s/ Steven K. Berry

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June 1, 2018



Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

)	
In the Matter of)	
)	
Protecting Against National Security)	WC Docket No. 18-89
Threats to the Communications Supply)	
Chain Through FCC Programs)	
)	

DECLARATION OF STEVEN K. BERRY

I, Steven K. Berry, declare as follows:

- 1. My name is Steven K. Berry. I am over the age of 18 and competent to make this declaration. The statements in this declaration are true and within my personal knowledge.
- 2. I am the President and CEO of Competitive Carriers Association ("CCA"). Our organization represents nearly 100 wireless providers ranging in size from small, rural carriers to larger regional and national carriers. CCA's member carriers serve anywhere from fewer than 5,000 customers to millions of customers. CCA also represents associate members, including equipment manufacturers and other vendors and suppliers of products and services throughout the supply chain that feeds mobile communications. CCA has taken a leading role in supporting cybersecurity and network security initiatives in light of the pressing need to secure the United States' telecommunications networks against hostile foreign actors, and regularly expresses its support for protecting America's telecommunications supply chain to stakeholders, regulators, and legislators. CCA is a voting participant as an industry partner in the Department of Homeland Security's National Coordinating Center for Communications, which is tasked with monitoring and preventing harm to the country's telecommunications infrastructure.

- 3. I communicate regularly with CCA members about policy and legal developments that may affect the telecommunications market generally or their businesses directly. I work closely with my staff, which includes government relations, regulatory, and legal teams, to communicate our members' concerns and opinions to appropriate agencies, committees, legislators, and staff in Washington, D.C., and across the country. My staff also is in daily contact with our members on issues of vital importance to the business and regulatory environment affecting competitive carriers. I have testified numerous times before congressional committees on a variety of issues affecting competitive telecommunications carriers, and CCA regularly participates in rulemakings and other policy initiatives conducted by the Federal Communications Commission ("Commission" or "FCC") and other relevant agencies.
- 4. The FCC's proposed rule regarding national security threats to the communications supply chain is extremely important to CCA's members. My staff and I have spoken with dozens of our members about the proposed rule. It is far and away one of our members' most pressing concerns. I have personally discussed with carrier executives how the proposed rule would affect their businesses and, through my staff, have collected feedback from many more carriers. The statements below are based on those discussions and my decades representing the telecommunications industry, during which I have become very familiar with the marketplaces that would be affected by the proposed rule.
- 5. Rural carriers must contend with higher costs and larger and more sparsely populated geographic coverage areas. Equipment, devices, and services often are more expensive for rural carriers because needed supply is lower and the costs of deployment are higher and these carriers do not possess the scope or scale to always garner the attention of the largest manufacturers. These problems are compounded by the technological difficulty of

providing reliable service to a population that is highly dispersed, often across varying and rugged terrain that experiences weather extremes.

- 6. For several decades, the Universal Service Fund ("USF") has been an important part of maintaining the development, growth, and preservation of rural America's access to critically important telecommunications and information services. USF funds support telephone, SMS, and data services for millions of Americans living in rural and other high-cost areas. Connectivity in rural areas is beginning to catch up to the rest of the country because of the critical support provided by the USF. While some of CCA's wireless carrier members have almost fully transitioned to 4G for data, all are looking either to deploy 4G, testing and deploying 4G VoLTE if it is not already in place, and looking ahead to 5G. High-speed, reliable connectivity buttresses public safety and underpins economic growth in an era where the internet and, especially, mobile platforms are critical to reaching and interacting with a diverse customer base. Greater rural connectivity serves not just residents of those areas, but also visitors and others traversing rural carriers' coverage areas, who have access to these networks on account of roaming agreements between rural carriers and larger regional and national carriers. The majority of the carriers who have helped connect rural America to the rest of the country realistically could not have built out their networks without USF funding, and many would not be able to survive without that funding.
- 7. Many USF-funded carriers, including CCA members, have used equipment provided by companies that are targeted by the proposed rule to build their networks and continue to use those companies' products and services to maintain those networks. The equipment and consumer devices offered by targeted companies are often two or three times less expensive than market competitors. Moreover, purchasing equipment is just one step in building

and CCA members value responsive and cost-effective customer services. These services include pre-deployment testing of new equipment to ensure that it will meet expectations, installation of new towers and equipment, upgrades to existing equipment, repairs to existing equipment, and on-the-ground troubleshooting of issues as they arise. Both scheduled upgrades and unexpected equipment failures can cause temporary outages in wireless coverage. The timeliness and quality of service providers make a big difference in the length of outages and the probability that outages will recur.

- 8. The services provided by the targeted companies are almost always less expensive and can be more reliable than their market competitors. Some of the larger vendors have "most favored nation" clauses in their purchase contracts with carriers serving large urban areas. These clauses effectively prevent those vendors from offering discounted rates to rural carriers. And certain vendors simply prioritize larger carriers with more urban and suburban footprints. For example:
 - a. One CCA member experienced a network outage in 2017 that lasted more than a day because the vendor did not service the affected equipment quickly. This affected nearly 40,000 consumers in rural and remote portions of the western United States, who were unable to reach emergency services or loved ones.
- 9. The targeted companies also provide customer support for consumer devices. The software that runs on phones, tablets, and other devices—including both operating systems and apps—must be updated regularly. The existing software communicates through the network with a server and, when an update is released, notifies the consumer that the download is

available. And when the update is downloaded, it often runs through the network. Strategies for infiltrating and compromising personal devices is constantly evolving; without the ability to download security updates, devices become highly vulnerable. Moreover, software that cannot be updated eventually will not work at all, which means not only that apps stop functioning one by one, but also that the device itself eventually becomes unusable.

- 10. The Commission's proposed rule would dramatically affect the market for core network equipment and services, resulting in substantially higher costs for rural carriers. Rural carriers also will be barred from dealing with a significant number of service providers and sellers of consumer devices. When lower-cost providers are eliminated from this market, supply decreases without a corresponding decrease in demand. Costs of equipment, devices, and services would rise. Uncertainty regarding which vendors might be determined in the future to present security risks would result in higher costs now. Both higher costs and market uncertainty would increase the cost of borrowing. And all those costs would likely mean higher rates for consumers, which when combined with the need for new devices would cause consumers to leave their carriers. The loss of customers would in turn increase costs for the remaining customers.
- 11. Furthermore, the proposed rule, as a practical matter, would likely require many carriers to rip and replace equipment purchased from targeted companies. Network equipment needs regular servicing and technology upgrades to remain usable and prevent recurring outages. It is uncertain whether upgrades provided by different manufacturers, as well as transitioning equipment piece-by-piece as it ages out, is practicable. Interoperability concerns mean that carriers cannot know whether such a hodge-podge transition period would allow their networks to run at optimal efficiency and provide services to their customers at the quality level promised

and expected. In order to ensure interim and long-term network continuity and to stay competitive in the constantly evolving telecommunications market, many carriers will have little choice but to replace all existing equipment purchased from targeted companies as quickly as possible.

- 12. Rural carriers' capital investment in the next generation of technology has already been chilled. Capital investments by CCA's carrier members have declined substantially in the first quarter of 2018, in large part because of anticipated tighter restrictions on carriers' access to equipment and services provided by certain foreign companies.
- 13. Discussions with CCA's carrier members have confirmed that the proposed rule would be devastating to many of them. For example:
 - a. One carrier that has roughly 100,000 wireless broadband customers estimates that the purchase price of replacement equipment is in excess of \$300 million, including approximately \$75 million to replace the core, and an additional \$60 million in installation costs. The downtime from installing new equipment would cause the company to forego at least \$50 million in roaming fees. In total, the proposed rule would result in \$410 million in direct, "rip and replace" costs, and at a minimum \$4 million in additional annual servicing costs, which does not take into account the likely higher costs of any materials, upgrades and inferior equipment and customer service.
 - b. Another member began installation of a new base station in a small town with a population of 26, according to the 2010 census, but as a result of recent actions by the administration, the member's vendor company has declined to complete software updates or to transfer software licenses, and the member has been unable to turn on LTE service as a result. The result is that the carrier has been unable to turn on LTE service.

That same CCA member has three more base stations, which were installed to bring wireless broadband services to areas where wireline service is insufficient, but work on those stations has halted because of the same licensing issue and reasonable worry that a penalty would be assessed.

- 14. Lack of wireless coverage has real, tangible effects on rural Americans.
 - a. As another example, one CCA member serving portions of rural Nevada received local coverage as a result of its work to deploy a cell tower in Death Valley National Park in Nevada. As a result of this carrier's efforts, two French nationals, a 27-year-old man and a 21-year-old woman, were rescued from extreme heat after making a phone call that may not have connected before this cell tower was installed. Competitive carriers live and work in the communities they serve, as evidenced in Death Valley where service from a rural and regional provider offered the only area of coverage in a literal "dead" zone.
- 15. CCA's members, including regional carriers serving rural areas, care deeply about national security and are prepared to follow a coordinated process designed to enhance the security of our nation's communications networks. However, there is little, if any, material evidence of the benefits to our national security if the FCC adopts its proposed rule. Therefore, CCA is skeptical of an incomplete, uncoordinated approach that disproportionately penalizes small carriers and rural consumers without significant and immediate enhancements to the nation's national security. The FCC should defer to other expert agencies to address these concerns.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

Executed on: June 1, 2018

Steven K. Berry

Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

)	
In the Matter of)	
)	
Protecting Against National Security)	WC Docket No. 18-89
Threats to the Communications Supply)	
Chain Through FCC Programs)	
)	

DECLARATION OF MICHAEL BEEHN

I, Michael Beehn, declare as follows:

- 1. My name is Michael Beehn. I am over the age of 18 and competent to make this declaration. The statements in this declaration are true and within my personal knowledge.
- 2. I joined SI Wireless LLC d/b/a MobileNation ("SI Wireless") in 2018 as Chief Executive Officer. SI Wireless provides mobile phone and broadband services to approximately 20,000 customers across the western portions of Kentucky and Tennessee. We work to provide a reliable and more cost effective alternative to the larger nationwide wireless brands, and, as of today, SI Wireless is providing 4G service to approximately 80% of our predominantly rural customer base. Until the FCC released the proposed rule, we were actively engaged in strategic planning to provide 4G to the remaining 20% of our customers and defining our path to next-generation 5G services. If the FCC adopts its proposed rule or anything similar, it would be very difficult, if not impossible, for SI Wireless to maintain its current network and implement future network upgrades.
- 3. SI Wireless receives USF Lifeline support which enables us to offer discounted voice and mobile broadband service to nearly 4,000 low-income subscribers, representing about 20% of our customers.

- 4. Under its current business plans, SI Wireless has and, absent the FCC's proposed rule, planned to purchase equipment and services provided by a company the FCC appears to be targeting with its proposed rule. SI Wireless's core network infrastructure is constructed with and depends on Huawei equipment. SI Wireless chose Huawei because it delivered excellent quality and was the most cost-effective option for a rural network deployment. SI Wireless has been in business for approximately 8 years and in that time we have been impressed with the performance of Huawei equipment. Huawei also is our primary provider of on-the-ground customer services, such as installation of new and upgrade equipment, repairs of equipment, etc. Huawei is highly cost-effective and it provides excellent customer service.
- 5. The FCC's proposed rule threatens SI Wireless's ongoing viability. If the FCC's proposed rule is adopted, SI Wireless would have to replace all of its existing Huawei equipment, which represents a majority of its network. Although the proposed rule purports not to prevent SI Wireless from using equipment that it has already bought, it is unlikely that any other equipment manufacturer would be willing to economically work with Huawei to ensure interoperability if the rule was adopted, nor is it likely that we could, under the proposed rule, pay Huawei for those services. Prohibiting Huawei equipment and services would mean SI Wireless could not appropriately test and install new equipment to ensure it can work on SI Wireless's current network, thereby introducing the interoperability problems that we have until now avoided. To ensure that we can provide the service our customers expect, certain network equipment would have to be replaced. We estimate that the purchase price of replacement equipment is \$40 to \$60 million. That additional capital cost far exceeds what our EBITDA can financially support. This cost, in turn, would likewise force SI Wireless out of business and

leave thousands of subscribers in rural Tennessee and Kentucky with less competitive alternatives.

- 6. Customers would be severely affected. First, customers might lose coverage altogether and network outages would occur during equipment testing and installation. Second, our customers, especially low-income consumers on account of whom SI Wireless collects USF Lifeline support, could experience increased fees, or would lose service altogether, if the costs imposed by the proposed rule cannot be recouped through the USF or other sources of revenue. This will create a ripple effect resulting in further costs for SI Wireless by pushing customers to other carriers and critically diminishing our revenue.
- 7. If the proposed rule is adopted, SI Wireless will be faced with spending millions of dollars to comply with the proposed rule, if it can survive at all. The proposed rule threatens to destroy the business we've worked hard to build and to leave our customers without wireless service.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

Executed on: June <u>1</u>, 2018

Michael Beehn

Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

)	
In the Matter of)	
)	
Protecting Against National Security)	WC Docket No. 18-89
Threats to the Communications Supply)	
Chain Through FCC Programs)	
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DECLARATION OF FRANK DIRICO

I, Frank DiRico, declare as follows:

- My name is Frank DiRico. I am over the age of 18 and competent to make this declaration. The statements in this declaration are true and within my personal knowledge.
- 2. In 1991, I formed NE Colorado Cellular d/b/a Viaero Wireless ("Viaero") as the Founder, President and CEO. Viaero provides mobile telephone, SMS, and wireless broadband services to nearly 110,000 customers and approximately 1.5 million unique roaming customers per month across Eastern Colorado, Western Kansas, Nebraska and parts of Wyoming and South Dakota. We have worked aggressively to build out our network to include 2G/3G and 4G VoLTE. Until the FCC released the proposed rule, we were actively engaged in strategic planning, construction and equipment purchasing, including building a fiber network to our towers and to metropolitan areas in the continued effort to improve signal strength and speed to existing customers. Viaero's network has

been relied heavily on support from the Universal Service Fund ("USF"). USF funds are mission-critical to completing and maintaining Viaero's 4G VoLTE network and to the transition to 5G.

- 3. Viaero has purchased equipment and services from Huawei and would continue to do so if the FCC does not finalize its proposed rule. Viaero's network is made up largely of Huawei equipment. Approximately 80% of equipment, including core, wireless, microwave, and fiber, was manufactured by Huawei. Viaero chose Huawei because it was the most cost-effective option and the most reliable product and excellent customer service. Before contracting with Huawei, Viaero worked with a more expensive vendor whose product never was able to successfully deploy in our markets. Huawei's services have been much better, which has resulted in better network performance and less downtime. Viaero has consciously used a US-based vendor separate and distinct from Huawei for our firewalls, routers and switches. No traffic gets in or out of our network without going through our US-based vendors routers and firewalls. This gives Viaero protection from any malicious act by Huawei or anybody else. We have reached out to several cyber security firms to further evaluate any vulnerabilities in our network.
- 4. The FCC's proposed rule threatens Viaero's ability to survive. Viaero believes it will have to replace all of its existing Huawei equipment, which makes

up four-fifths its network. Although the proposed rule does not prevent Viaero from continuing to use equipment that has already installed, , we are very concerned that non-Huawei equipment will not be able to effectively interoperate with Huawei equipment and that other vendors will be able to adequately service Huawei equipment. We estimate that the purchase price of replacement equipment would be in excess of \$300 million including approximately \$75 million for to replace the core, and an additional \$60 million in installation costs. During installation of the new equipment, Viaero will have to forego as much as \$50 million in roaming fees from several national carriers. Viaero also would have to find a new service provider and initial estimates are approximately \$4 million more annually than we currently pay. In total, the proposed rule would result in \$410 million in direct, "rip and replace" costs, and \$4 million in additional annual servicing costs, which does not take into account the likely higher costs of any materials, upgrades and lost time from installing inferior equipment and less responsive customer service from the other equipment manufacturers.

5. Our customers will be significantly impacted. Portions of the network will have to be taken down to test equipment before installation and during installation itself, most notably, 911 Phase 2 testing. Those outages will be significant.

Customers will be unable to use their devices for everyday tasks, including contacting emergency services. These outages will affect not just Viaero's

subscribers, but also customers of other carriers that have roaming agreements with Viaero. Moreover, fees might have to be raised to recover some of the proposed rule's massive costs. We would expect a sizable loss of customers dissatisfied with higher fees and network downtime. Fewer customers means less revenue and greater difficulty maintaining, growing, and upgrading our network and services.

- 6. The uncertainty introduced by the FCC's proposed rule and other possible restrictions on using Huawei and ZTE equipment and services has been forced Viaero to reduce its capital investment in network capacity upgrades and expansion.
- 7. 7. The FCC's proposed rule would put Viaero in an almost impossible situation. We must decide whether to comply to the tune of \$410 million in upfront costs, or not receive critical USF support. Regardless of which we choose, it will be a struggle to keep Viaero afloat. Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

Executed on: June 1, 2018

Frank DiRico

Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

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In the Matter of)	
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Protecting Against National Security)	WC Docket No. 18-89
Threats to the Communications Supply)	
Chain Through FCC Programs)	
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DECLARATION OF JAMES GROFT

I, James Groft, declare as follows:

- 1. My name is James Groft. I am over the age of 18 and competent to make this declaration. The statements in this declaration are true and within my personal knowledge.
- 2. In 2004, I was named CEO of James Valley Telecommunications (JVT) by the board of directors. JVT provides voice, mobile telephone, video, and broadband services to nearly 10,000 customers in South Dakota. We have worked aggressively to build out our 4G LTE network, and 100% of our predominantly rural customer base has full access to 4G LTE service. We have been actively engaged in strategic planning to be prepared for 5G. JVT's network has been built-out with support from the Universal Service Fund ("USF"). Without USF funds it would be impossible for JVT to make the transition to 5G and to maintain its 4G LTE network.
- 3. JVT has and, absent the proposed rule, would continue to purchase equipment, services, and devices provided by the companies the FCC appears to be targeting with its proposed rule. JVT's network is made up largely of Huawei equipment. 100% of our wireless core and wireless radios were manufactured by Huawei. JVT chose Huawei because it was the most cost-effective option with a 40% savings versus the 2nd most cost-effective option. Huawei

is also consequently our primary provider of customer support services, such as installation of new equipment and software upgrades. Huawei is highly cost-effective and it provides excellent customer service. Before contracting with Huawei, JVT had a series of terrible experiences with another, higher priced vendor. Huawei's service record, while not perfect, has resulted in fewer and less severe coverage outages for our customers. Huawei is there when our customers need them.

- 4. The FCC's proposed rule poses the single biggest threat to JVT's ongoing viability. JVT believes it will have to replace all of its existing Huawei equipment, which represents the lion's share of its network. Although the proposed rule does not prevent JVT from continuing to use equipment that it already purchased, we have very serious concerns about long-term interoperability if we were to continue using Huawei equipment in conjunction with newer equipment (including upgrades) from different manufacturers. A strict ban on using Huawei equipment moving forward would not allow JVT the time to properly test and calibrate new equipment to ensure it can work with a predominately Huawei legacy network. In order to ensure that we can provide the service our customers expect, we would have to make as clean a break as possible. We estimate that the purchase price of replacement equipment is close to \$5,000 per affected customer and would result in the abandonment of a network that is not fully depreciated and does not need to be replaced.
- 5. Customer impact would be significant. Parts of our network will have to be shut down for significant periods of time to test equipment before installation and during installation itself. Consumers, including subscribers to other carriers who access our network pursuant to a roaming agreement between JVT and other carriers, will be unable to use their devices to call 911 or family members, process customer credit card payments, obtain driving directions, or

perform innumerable other tasks that rely on wireless connectivity. Unfortunately, our customers will certainly experience increased fees if the costs imposed by the proposed rule cannot be recouped through the USF or other sources of revenue. We would expect a measurable increase in customer's dissatisfaction because of higher bills and disruptions in coverage. This expected bump in customer dissatisfaction will create further costs for JVT by pushing customers to consider other carriers, which affects our revenue stream and exacerbates the problems directly engendered by the proposed rule.

- 6. Because of the uncertainty presented by the proposed rule and other possible governmental restrictions on Huawei JVT has restricted investment in its wireless network until the uncertainty has passed.
- 7. If the FCC adopts the proposed rule, JVT will be put between a rock and a hard place. Either JVT can forego USF funds, which are essential to our ability to maintain our existing network and to make the jump to 5G, or JVT can continue to accept USF funds and spend millions of dollars to comply with the proposed rule. Under either option, JVT's ability to survive would be put into serious question.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

Executed on: May 29th, 2018

James Groft, CEO

James Valley Telecommunications

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In the Matter of)	
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Protecting Against National Security)	WC Docket No. 18-89
Threats to the Communications Supply)	
Chain Through FCC Programs)	
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DECLARATION OF TODD HOUSEMAN

I, Todd Houseman, declare as follows:

- 1. My name is Todd Houseman. I am over the age of 18 and competent to make this declaration. The statements in this declaration are true and within my personal knowledge.
- 2. In 2015, I joined United Telephone Association, Inc. ("United") as General Manager / CEO. I was named General Manager / CEO of United by the board of directors. United provides mobile telephone, SMS, and wireless broadband services to nearly 20,000 customers in 17 southwest Kansas counties. United was the first tier 3 wireless carrier in the United States to commercially launch a 4G LTE mobile network. That network covers United's entire licensed territory. United also provides wireline telephone service to 3,856 customers in 11 rural southwest Kansas exchanges and is currently deploying fiber-to-the-home in these communities.
- 3. The wireless network deployed by United consists primarily of Huawei equipment. Six years ago United chose Huawei due to two main factors. First, at the time, they were the only company manufacturing equipment that allowed United to fully utilize its spectrum holdings. The technical solution offered by Huawei was superior to other equipment manufacturers. Second, Huawei was by far the most cost effective.

- 4. The United networks (wireless, landline, and fiber) have been built with support from the Universal Service Fund ("USF") and United prides itself in being a good steward of these funds by deploying the most cost effective and technically sound networks possible. When the FCC released its proposed rule, United was in the process of ordering new Huawei equipment. This equipment would provide additional broadband internet speed to customers who do not live in or near a town by utilizing the recently purchased 600MHz spectrum. This project is now on hold. Without USF support United will not be able to build, operate, and maintain the new 600MHz wireless network.
- 5. United works hard every day to help further the FCC's goal to close the "digital divide" between urban and rural areas. Given the high cost to provide communication services in extremely rural areas United does rely on USF support. The uncertainty created by the proposed rule has forced United to freeze all capital investment in the 600MHz wireless network expansion and if adopted, would force United to scrap its existing plans and explore more costly alternative means of meeting the mandate to supply rural customers with broadband services.
- 6. United is a rural telephone cooperative in the heartland of America and nobody wants to protect our National Security more than United. But targeting certain equipment vendors, absent some means of certifying equipment from all manufacturers, injects an elevated level of risk for future network investment. Today the target is ZTE and Huawei; what assurance is there that other providers won't be the targets tomorrow?

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

Executed on: June \(\frac{1}{2}\), 2018

Todd Houseman

In the Matter of)	
Protecting Against National Security Threats to the Communications Supply Chain Through FCC Programs)	WC Docket No. 18-89

DECLARATION OF MICHAEL D. KILGORE

- I, Michael D. Kilgore, declare as follows:
- 1. My name is Michael D. Kilgore. I am over the age of 18 and competent to make this declaration. The statements in this declaration are true and within my personal knowledge.
- 2. In 2005, I joined Nemont Telephone Cooperative, Inc. ("Nemont") as Plant Operations Manager and, in 2009, I was promoted to General Manager and CEO of Nemont by the Board of Directors. Nemont provides mobile telephone, SMS, and wireless broadband services to nearly 12,000 customers across northeast and southcentral Montana, and northwest North Dakota through its wholly own subsidiary, Sagebrush Cellular, Inc. In many cases, Nemont's networks are the only networks in this service area. Not only do they serve their own customers, Nemont's wireless networks also serve nearly 300 million subscribers of the nation's largest carriers through roaming agreements. Nemont also provides wireline telephone and broadband access to approximately 20,000 customers in the States of Montana, North Dakota, and Wyoming. We have worked aggressively to build out our 4G network, and over 80% of our predominantly rural customer base has full access to 4G service. Until the FCC released the proposed rule, we were actively engaged in strategic planning to enhance our mobile broadband network. In building our network, we have relied on Universal Service Fund ("USF") support.

Continued USF support is essential for Nemont to enhance its 4G network, let alone make the transition to 5G.

- 3. Nemont's wireless network is made up largely of Huawei equipment; over 70%, including the core and RAN networks was manufactured by Huawei. Nemont selected Huawei as our wireless vendor due to its technical capabilities, customer support, and cost effectiveness. If the FCC adopts its proposed rule, Nemont believes it will have to replace all existing Huawei equipment as a result of the significant uncertainty regarding interoperability if Nemont could no longer contract with Huawei for services and replacement equipment. We estimate that the purchase price of replacement equipment is around \$57 million including installation costs and the likely higher cost of any materials, support, and upgrades going forward. These costs threaten the viability of Nemont's wireless network.
- 4. Our customer base would be significantly impacted. Nemont's customers rely on our network to access emergency services, for business purposes, to learn, and to engage with the wider world. Customers likely would experience outages as we test and install replacement equipment. Additionally, customers might see higher bills because of the need to ameliorate the immense costs of network equipment replacement. Customer dissatisfaction would likely lead to decreased subscribership, which would further hit Nemont's bottom line.
- 5. Because of the uncertainty presented by the proposed rule and other possible governmental restrictions on Huawei, Nemont has significantly slowed down its capital investment in wireless network expansion. We have delayed our goal of 100% 4G coverage.
- 6. The FCC's proposed rule threatens to put Nemont out of the wireless business and leave its customers without wireless service. Regardless of whether Nemont chooses to go

without USF funds or to spend the tens of millions of dollars to comply with the new regulation, Nemont's viability would be put in jeopardy.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

Executed on: June 1, 2018

Michael D. Kilgore

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In the Matter of)	
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Protecting Against National Security)	WC Docket No. 18-89
Threats to the Communications Supply)	
Chain Through FCC Programs)	
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DECLARATION OF JOHN C. NETTLES

I, John C. Nettles, declare as follows:

- 1. My name is John C. Nettles. I am over the age of 18 and competent to make this declaration. The statements in this declaration are true and within my personal knowledge.
- 2. I am President and CEO of Pine Belt Cellular, Inc. ("Pine Belt") having served in that capacity since October 1994. Pine Belt provides mobile telephone, SMS, and wireless broadband services in the five Alabama counties of Choctaw, Dallas, Marengo, Perry and Wilcox.
 - 3. Specifically, Pine Belt, along with its parent and affiliate companies, provides:
 - 4G-LTE wireless broadband (both mobile and fixed), 3G-CDMA wireless broadband, 1xRTT wireless voice and broadband across the Alabama counties of Choctaw, Dallas, Marengo, Perry and Wilcox;
 - ILEC and CLEC voice and broadband ILEC and CLEC services in parts of each county named above, plus Clarke County, Alabama; and
 - Traditional HFC cable TV services in parts of Choctaw and Clarke Counties,
 Alabama.

4. The comments filed by the Competitive Carriers Association in the abovereferenced docket are true and correct to the best of my knowledge. Pine Belt has also filed comments of its own, and it hereby refers to such comments for more information about its position on the matters presented in the above-referenced docket.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that, to the best of my knowledge, the foregoing is true and correct.

Executed on: June 1, 2018

John C. Nettles

In the Matter of)	
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Protecting Against National Security)	WC Docket No. 18-89
Threats to the Communications Supply)	
Chain Through FCC Programs)	
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DECLARATION OF ERIC J. WOODY

I, Eric J. Woody, declare as follows:

- 1. My name is Eric J. Woody. I am over the age of 18 and competent to make this declaration. The statements in this declaration are true and within my personal knowledge.
- 2. In 2008, I was promoted to Chief Technical and Operations Officer (CTOO) of Union Telephone Company d.b.a. Union Wireless ("Union") by the Union board of directors. Union provides mobile telephone, SMS, and wireless broadband services to nearly 40,000 customers across Wyoming, Colorado, Utah and Idaho. We have worked aggressively to build out our 4G LTE (Long Term Evolution) Data and 3G UMTS (Universal Mobile Telecommunication System) Voice network, and 90% of our predominantly rural customer base has full access to 4G LTE Data and 3G UMTS Voice service. Until the FCC released the proposed rule, we were actively engaged in strategic planning to be prepared for a complete overlay of 4G LTE with the introduction of VoLTE (Voice over LTE) by the end of 2018. We were also looking forward to performing 5G trials in early 2019 to get ready for the next evolution of technology in this industry. Union's network has been built-out with support from the Universal Service Fund ("USF"). Union receives approximately \$20 million in USF funds

annually. Without USF funds, it would be very difficult, if not impossible, for Union to make the transition to 5G and to maintain its 4G VoLTE network.

- 3. Union has in the past and would continue to purchase Huawei equipment and services if the proposed rule is not adopted. Union's network is made up largely of Huawei equipment. Approximately 75% of Union's network equipment, including core, wireless, and microwave, was manufactured by Huawei. Union chose Huawei because it was the most cost-effective option as well as the only vendor who actually responded to my request for proposal at the time. It was necessary to change network vendors due to continued service interruptions, lack of timely support and excessive support costs. Again, Huawei is highly cost-effective and it has provided Union with excellent customer service. Before contracting with Huawei, Union had a series of terrible experiences with another, higher priced vendor. Huawei's service record has resulted in fewer and less severe coverage outages for our customers.
- 4. The FCC's proposed rule presents a singular threat to Union's ability to stay in business. Our past experience has shown us that other vendors cannot or will not interoperate with Huawei equipment. As such, the proposed rule would require Union to replace all the Huawei equipment in its network. We would have to install the new equipment and go through all the testing while operating dual parallel networks, then transition from the Huawei to the new vendor. We estimate that the purchase price of replacement equipment to be around \$40 to \$45 million, with approximately another \$60 to \$75 million in installation costs. We also estimate that it would take 5 years to completely transition from our Huawei network to a new vendor due to permitting and weather issues with being able to access to all of our facilities. The downtime from installing new equipment would cause Union to forego another \$26 million in roaming fees annually from a larger carrier. Union also would have to find a new service provider; we

estimate our typical services will cost \$2 million more annually than we currently spend. We also estimate a loss of approximately \$20 million in lost USF annually while we continue to engage with Huawei during the transition process. In total, the proposed rule would result in \$340 million in direct, "start-up" costs. This expense and activity would severely hamper our ability to further expand our service offering to areas with are currently underserved or unserved. Every dollar and hour spent of replacing equipment that would remain in place but for the FCC's rule is a dollar and hour not spent on expanding the network to reach those who desperately need these services.

- 5. Union's customers and roaming subscribers of other carriers who access our network pursuant to a roaming agreement between Union and those other carriers will be significantly impacted by the proposed rule. Even with dual parallel networks, outages could occur while equipment is tested and installed. This will also prevent all GSMA compliant devices from accessing 911/Emergency services during these outages. Other services that can be impacted include but are not limited to processing of customer credit card payments, obtain driving directions, or performing innumerable other tasks that rely on wireless connectivity. Customers might also end up with increased fees if additional revenue cannot be raised elsewhere. On account of all of this, it is likely that customer satisfaction and retention will decrease, which makes it even more difficult to sustain the business.
- 6. Union has halted some critical projects and significantly slowed down other capital investment in network expansion because of the uncertainty created by the proposed rule and other potential governmental actions related to Huawei. At this time of extreme uncertainty, we have tentatively pushed back our investment in IMS (IP Multimedia System) which is necessary for 4G VoLTE. It was out intention to be able to offer 4G VoLTE and VoWiFi (Voice

over WiFi) services throughout our LTE network by the end of 2018; now we will be lucky to be able to do it prior to the end of 2019 or possibly into 2020.

7. If the FCC adopts the proposed rule, Union will be put in a lose-lose situation. Union can stop taking USF funds, which are critical both to ongoing business and to transitioning to 5G. Alternatively, Union can shoulder more than \$300 million to comply with the proposed rule and ensure ongoing USF support. Under either option, Union's ability to survive would be put into serious question. In the end the ones that suffer the most are those in current underserved and unserved areas that once again have to wait to get the services that the vast majority of others receive today; the customers in Rural America.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

Executed on: June 1, 2018

Eric J. Woody